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Accounting Practice

A COMPREHENSIVE STATEMENT OF ACCOUNTING PRINCIPLES AND METHODS, ILLUSTRATED BY MODERN FORMS AND PROBLEMS

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Modern Business

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PART I: ACCOUNTING STATEMENTS

CHAPTER I

PURPOSE OF ACCOUNTING

1. *Ancient records.*—Evidently, the necessity for keeping records of business transactions was recognized as long ago as 2500 B. C. Research among the ruins of ancient Babylon has brought to light a large number of tablets containing complete records of commercial transactions. It is even suggested that the Phœnicians, the merchants of the ancient world, evolved the alphabet for the purpose of bookkeeping, in order that they might be able to express the debits and credits and so avoid being cheated.

There is record of a highly developed system of accounting in Athens, used by the Greek traders and by Athenian public officials during ancient times. The public accounts, for example, were kept by clerks among whom was a checking clerk of the Senate for money received, another for money disbursed, with a number of subordinate clerks. All the accounts were carefully scrutinized and every person who had any share in the administration was subject to investigation.

Rome also had a system of state accounting, based upon the system prevalent in private life. The head of the Roman family entered in a sort of day book (*adversaria*) all the receipts and expenditures of the house-

hold and posted these items monthly to a register (*codex accepti et depensi*). According to Roman jurisprudence an entry made with the consent of the debtor was considered good evidence of a civil obligation.

The first trace of an accounting system in an English-speaking country is found in the records of the twelfth century in Great Britain. The exchequer kept the accounts for the Crown, and each sheriff was required to appear twice a year to render an account as well as to turn over to the exchequer part of the revenues he had received.

In receipt, the sheriff received a "tally," made of wood and showing a complete statement, notches having been cut to represent the payment of pounds, shillings and pence. This "tally" was then split into two parts, each part showing the same amount, one-half remaining with the exchequer, the other half being given to the sheriff. The presentation of the half "tally," matching the other half in the possession of the exchequer, was evidence of payment, and the turning over of the balance on hand, by the sheriff, closed the account.

2. *Value of early methods.*—In all these primitive methods, there was no thought of keeping permanent accounts, and the records themselves were of a temporary nature. Nor does evidence exist of any attempt to make accounts serve the constructive purposes which is such a characteristic feature of accounting records today. They were never referred to except as memoranda of incompleted transactions, and when a settlement was made, the transaction was completed, and the records, in most cases destroyed. Yet these crude records, these "tallies," were probably the first expression of double-entry bookkeeping and the first evidence of precaution in account keeping.

It was not until the latter part of the fourteenth century that a comprehensive system of keeping accounts was developed and put into operation. The Venetian traders, about that time, evolved and gave to the business world what is now known as the double-entry system of bookkeeping. It was, of course, primitive, but the basic principles of debits and credits have not been changed materially since then. Modern progress has simply enlarged upon these principles, eliminating one intermediate record after another and sub-dividing accounts as they became too vague or too general to meet the various needs of our present complex business systems.

Even the records employed by the Venetians were primarily of value only as evidence of the transactions recorded. True, the double-entry system, in a measure, insured accuracy, but accurate records apparently were of value only in so far as they prevented dispute between the parties to the transactions. Although these pioneers in accounting did not enjoy the full benefit of their systems, and did not hand down to posterity a thorough and complete system of account keeping, the modern business community is nevertheless indebted to the early Venetian tradesmen for the fundamental principles upon which are based all present accounting methods, whether those of the corner grocery store or of the mammoth banking, railroad and industrial enterprises.

3. *When no accounts are required.*—One can scarcely find a business enterprise of any kind, in which no accounts are kept. It is true that some of the systems of accounts are inadequate on the one hand or over-expanded on the other, due either to lack of proper understanding of the principles or to faulty application of

them, yet some method of accounting is employed. There is, perhaps, only one type of business man who can dispense entirely with bookkeeping or accounting records. A small merchant handling a single article, such as horse blankets, for example, with so small a stock that he can readily count it, and selling for cash, could possibly keep his business in order without the aid of a set of bookkeeping records. Other small merchants like cobblers and peddlers are usually content with counting their cash receipts at the end of the day. But even such merchants, unless they keep their surplus cash under loose boards in their attics, have at least a bank book record of their deposits, which gives them a running index of their prosperity year by year. Moreover, they usually keep some crude records in the shape of memorandum books or diaries.

4. *Authentic records of transactions.*—The average business man, however, would not be without an accounting system; he knows that it is his chart and compass. The questions which most interest him are, what various purposes does a system of accounts serve and am I securing the full benefit of these advantages in my business?

The first purpose of such systems is that which the Greeks, Romans and Venetians had in mind, namely, establishing records. They wanted an account of some sort which would be understood by both parties to a transaction and which would serve as authentic evidence of the particular transaction. Similarly, the modern business man is anxious to reduce to writing every business transaction that occurs during the course of his dealings. The accounting records are more especially intended to serve as an account—a narrative—of what has happened, to which the business man may refer when the need arises, and not primarily as a basis for settling disputes. This

is due to the fact that to-day important transactions are placed in contract form and usually there is some other evidence besides account books which is recognized by both parties as being a true and complete statement of any agreement made. This other evidence commonly consists of order blanks, letters, telegrams and formal contracts.

The accounting records are relied upon for the settlement of differences only when the disputed transaction was consummated verbally. More often, however, the proprietor or manager or department head desires to know whether John Smith has paid his account, whether he is buying more or less than formerly, what was the date of the last purchase, or whether he is paying in ten, twenty, thirty or sixty days. The accounting records, if properly kept, will afford information of this sort quickly and accurately.

5. *Analysis of previous results.*—It used to be the practice to "close the books" once a year in order to determine whether the company had been making a profit during the previous twelve months, and, if so, how much. The average bookkeeper and accountant felt satisfied, if, after closing the books, all his statements were in balance. The proprietor, however, always has been concerned more especially with the results shown by the statements. How large was the profit compared with that of the preceding year? A smaller profit demanded an investigation; perhaps the business was concentrating too much on a line of goods upon which the profits were less than on others. Possibly there was a leak in some expense account. It might be that the advertising department was squandering money on unproductive advertising; perhaps the credit department sustained heavy losses through insufficient protection against bad

accounts. If the profit had increased, a similar investigation was suggested through a desire to devote more attention to the profit-making factors in the business.

It was found, however, that a year was too long a period to wait for an analysis of this sort. The time to push vigorously a paying policy or to stop unwarranted expense is not several months after its maximum influence may have passed. Accordingly, timely knowledge is what the manager especially needs. Records properly kept will supply this information; hence the tendency today is toward making analyses of it monthly or quarterly rather than annually, with special investigations going on all the time.

6. *Protection against fraud.*—These frequent analyses are valuable also in detecting at an early stage irregularities that may have crept into the concern's routine—fraud practiced by customers, creditors or employés. The defalcation of an officer in one of the big railroad offices in New York, which caused so much comment at the time, is only one of hundreds of cases illustrating the lack of analytical examination of the results shown by the accounts, beyond the routine checking by auditors. It is frequently possible even without the aid of an audit, to sense irregularities, such as abnormal increases in the payroll, which possibly indicates payroll padding; peculiar conditions in, say, the returned goods account, which might hint that payments made by customers were retained and their accounts credited with goods that were not really returned, or point to other similar irregularities. The manager or department head can, through intelligent interpretation of the results shown by the accounts, nip in the bud many a fraud which might otherwise have proved to be serious.

7. *Measure of efficiency.*—Such analyses are also extremely useful in determining whether a department, an individual, or one of a number of plants, is efficient. It must be remembered that in the last analysis, the accounting system is the court of inquiry that hands down with regard to nothing but the truth, its unerring judgment as to the right or wrong, in a commercial sense, of the firm's transactions. It says with definiteness, "you have made a profit" or "you have incurred a loss" or "you have made a profit but it is smaller than last year's, or last month's," as the case may be, or "your profit is much greater this year than last," and so on. Furthermore, it also indicates how the result stated has been obtained.

With this information at his command, the executive can, if he will, determine which of his plants or departments or individuals were responsible for the result, or for parts of it. He is thus in a position to determine which of these plants, departments or individual members of the organization are improving and can act accordingly.

8. *Establishing new policies.*—Through analytical study of the accounting records, the executive head or heads of a business enterprise are necessarily brought face to face with certain conditions which influence them in determining future courses of action. If, for example, the accounting records clearly indicate that previous advertising resulted in a satisfactory increase in sales, the chances are that a more extensive advertising policy will be adopted. If the records show that the company is handling too many lines, and that in consequence the efforts of the organization are too widely scattered, steps would be taken to concentrate more and more upon a few, perhaps only one, article. Again

if the accounts show an unusually small percentage of losses from bad debts, while at the same time it appears that sales under the circumstances, should be larger, it is likely that the company's credit policy is too restricted and that it should be made more liberal.

The growing tendency in business is to base action affecting the future upon experience and records of past performances rather than upon mere opinions. If it were permissible to express this tendency in figures, it might be said that the new policy represents about 75 per cent experience and 25 per cent opinion.

9. *Forecasting the future.*—The alert business man looks far ahead into the future and plans the progress of his business accordingly. He is said to possess foresight; yet foresight is not merely a matter of looking ahead. On the contrary, it involves a careful scrutiny backward upon those events that have already taken place, in order to determine the possible trend of events yet to come. You equip yourself with a raincoat, overshoes and umbrella, because you know that a storm is expected. Your less thoughtful friends who become drenched, credit you with foresight. As a matter of fact, you had seen the weather-vane point toward the East and had observed the cloudy sky; your past experience with similar climatic conditions told you that a storm was due.

In the same way, careful examination of the accounts for an indication of what the future has in store, is necessary before the business executive can exercise business foresight. Thus if a new selling policy is under consideration, an examination of the sales account for a number of years back will indicate, in a general way, the sales tendency in the future. The chart in figure 1 shows heavy increases in the percentage of sales during

the first five years. After that, the upward course is not quite so sharp, indicating that the business is reaching its stride and that future increases will be due to the normal growth of the population rather than to the establishing of a new product or a new company. The curve, in other words, will have a tendency to become almost horizontal as shown by the dotted lines after the eighth year. This, of course, is merely a hypothetical illustration of one of the methods to be employed in forecasting the future. No one tendency is relied upon in planning any definite action. The executive must note carefully all the tendencies reflected by his accounting records as well as by outside statistics and other information, and, using these as a basis, plan for the future.

10. *Importance of accounting practice to executives.* —To some extent, every individual in a business organization, it is agreed, is responsible for the prosperity of the business. Each person's effort consequently is certain sooner or later to be reflected in some way in the accounting records. Even a laborer in the factory, should he spoil a considerable quantity of material, would influence the records to such an extent that an observant manager with proper accounting records could trace the loss directly to the man responsible. Those who have charge of departments or hold other responsible positions have it in their power to affect the accounting records one way or the other still more seriously. It follows, then, that a man in business cannot be thoroughly conversant with the work he has to do, no matter how specialized it may be, unless he has a full realization of the manner in which the results of that work will affect the business as a whole, as shown through the accounting records; and the more important his work the more important is such knowledge.

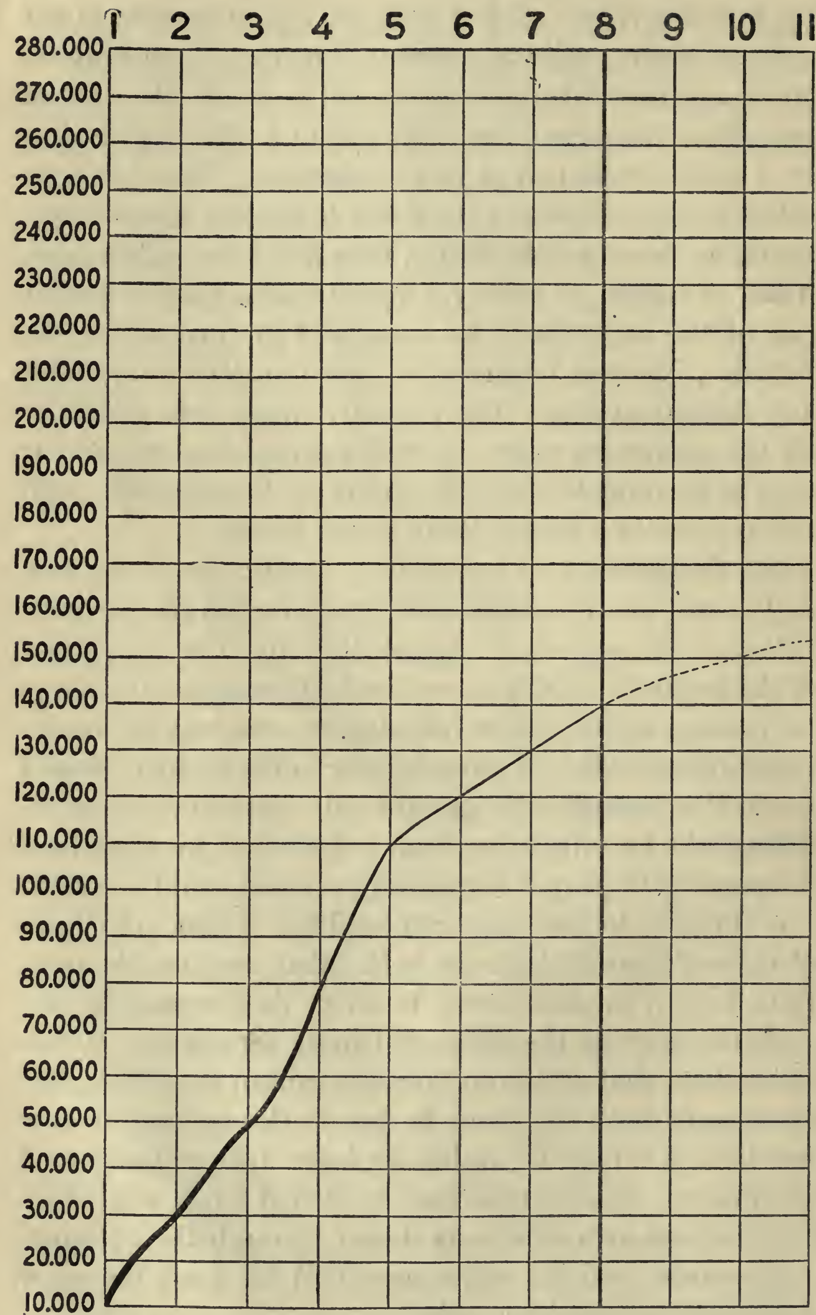

FIGURE 1.—HYPOTHETICAL CHART SHOWING SALES TENDENCY.
(Number across top indicates years; those at side, amount of sales.)

Men who hold or expect to hold executive positions must be familiar with accounting methods in order to understand clearly how the efficiency of their departments is measured in accounting terms. It often happens, also, that incorrect charges are made against some department, or that too large a proportion of the general expense is charged to it. The advertising manager of a large concern in the West found, for example, that the president, who was charitably disposed, had donated large sums of money to hospitals, and that these amounts had been charged against the advertising department. The advertising manager, when told that the company was spending too much money for advertising, reasoned that some unwarranted charges must have been included among the advertising expenditures. He asked for an analysis of the advertising accounts and soon discovered that items over which he had no control were charged against his department.

All who have business dealings with others, whether these be customers, prospective customers or creditors, should be familiar with accounting methods. Such knowledge will aid in avoiding conflict with the accounting systems of other houses, in establishing lines of credit, in selecting apt sales and advertising arguments, and in more firmly establishing a point of contact between the business and those with whom it deals.

Accounting thus becomes a vital element in business relations. Its presence is so essential and its services so numerous that no man can intelligently direct any business undertaking without a knowledge of its principles and methods. Such knowledge is part of the equipment of every well-rounded business man.

CHAPTER II

THE BALANCE SHEET

11. *Classification of accounting statements.*—As was indicated in the previous chapter, the really important functions of a concern's accounts are centered in the periodical statements which reflect in dollars and cents the results of its activities. The business executive is more concerned with these statements than he is with any other part of the accounting system. For this reason we shall discuss the statements themselves before we consider the records from which they are prepared.

All accounting statements may be divided into two groups: first, those which indicate the financial strength of the business; second, those which reflect its earning power. The first group is headed by what is known as a balance sheet which, in effect, is nothing more than a list of property owned and of debts owed, with the difference between the two shown; which difference indicates what part of the enterprise actually belongs to the proprietors. All other statements in the first group are subsidiary or supplementary to the balance sheet, explaining in greater detail facts set forth in brief or condensed form in the balance sheet itself.

The second group of statements, those which reflect earning power, is headed by what is known as the profit and loss account or profit and loss statement. This statement and its supplementary documents form the business executive's guide. They tell him what his sales, costs, and expenses have been, how much profit or loss

has resulted, and show him what the component parts of this profit or loss are.

THE JOHN JONES COMPANY

BALANCE SHEET

January 2, 19—

ASSETS, RESOURCES OR DEBITS		LIABILITIES AND CAPITAL OR CREDITS	
Cash	$1,000.00	Accounts we owe	$3,000.00
Accounts due us	5,000.00	Capital, or proprietary interest	16,000.00
Stock on hand	3,000.00		
Building owned	10,000.00		
	$19,000.00		$19,000.00

FIGURE 2.—EXAMPLE OF AN ELEMENTARY BALANCE SHEET.

12. *What is a balance sheet?*—A balance sheet is sometimes known by the term "financial statement," although this term more frequently is used in the plural and refers to all the periodical accounting statements taken collectively. The balance sheet is also sometimes erroneously called a "statement of assets and liabilities." While this term very nearly describes the balance sheet, it is lacking in one particular, namely, the item or items representing the difference between the assets and the liabilities, referred to in the previous section. This difference in the balance sheet is the means of maintaining the equilibrium or balance, the feature from which the term "balance sheet" takes its name.

A balance sheet, therefore, is a statement setting forth the assets owned by a business enterprise on a definitely mentioned day, the liabilities owed and the difference between the two which Professor Sprague [1] calls the "proprietary accounts." An example is shown on this page. On the one hand are listed the various items of property to which the business has

[1] See "The Philosophy of Accounts," by Charles E. Sprague.

title on January 2. By referring to the books or by actual count, it is ascertained that the cash in hand and in the bank is $1,000; the other items are determined in a similar manner. Obviously, a list of the property owned might be prepared without the aid of any books of account, by simple examination and appraisal. In the great majority of cases, however, such a process is impracticable. Not only would it require too much time and labor, but the accuracy of the results would be open to serious question.

Against the list of property of various kinds—known as assets or resources—are the obligations of the business and the actual proprietorship. To determine the worth of the John Jones Company it is not enough to ascertain what property it owns; we must also deduct its obligations or liabilities, thus:

Assets	$19,000.00
Less liabilities	3,000.00
Net worth, capital or proprietorship	$16,000.00

The balance sheet presents this identical mathematical proposition in equation form, thus:

Assets $19,000 = Liabilities $3,000 + Proprietorship $16,000.

If the reader will count the cash in his pocket, add to it his bank balance and the value of the securities, real estate, house furnishings, clothes and other personal belongings, and write on a piece of paper a list of these assets; and if he will write down opposite, a list of his bills, mortgages and other debts, deducting one total from the other and adding the difference to the smaller side so that both totals will be equal, he will have prepared a statement of assets and liabilities. The same

statement, containing the same information but compiled from a double entry set of books, would be called a balance sheet.

There has been much discussion among expert accountants as to the use of various terms, not only in the balance sheet, but in other accounting statements as well.[1] There is general agreement, however, as to the fundamental principles, namely, that the balance sheet must present a list of the assets, liabilities and proprietary accounts, with the proper values attached, as they appear on a specified date. Whether the term "resources" is used instead of the word "assets" or whether the terms "debit" and "credit" are preferred is of no particular moment so long as the balance sheet contains the information called for and presents it in such a way that interested persons will have no difficulty in understanding the full significances of each item. In some enterprises, such as banks, insurance companies and railroads, the form of the balance sheet and the terms to be used are prescribed by law and in such cases there is little or no room for doubt or choice. Usually blank forms are provided, and it is only necessary to fill in the proper amounts where indicated by the printed headings and subheadings.

13. *Purposes of balance sheet.*—But when the accountant or bookkeeper, perhaps after much labor,

[1] Some writers confuse a statement of assets and liabilities with a balance sheet, while a balance sheet may contain the same items as the statement of assets and liabilities, the sources of compilation are different. A statement of assets and liabilities may be prepared from any data available; not necessarily from the books of account, "Statement of Assets and Liabilities" is the proper title under which the resources and liabilities of a concern whose books have been operated upon the single entry principle may be arranged. A balance sheet is a concise statement of ledger accounts remaining after the accounts indicating income and expenses have been transferred to a summary account; it is compiled from a set of books operated upon the double entry principle and presents a list of the assets, liabilities and proprietorship of the concern at a particular moment.

finally emerges with his completed balance sheet, of what particular interest is it to the executive? Is it enough to assume that his accountant is conscientious in performing his duties and that therefore he may safely rely upon the accuracy of the books? Will it suffice to congratulate his employé and neatly file the balance sheet with others for previous periods? Such a practice does not utilize the full service of the balance sheet. On the contrary, it ignores the chief functions of that document.

Again while the balance sheet does perform a useful service in verifying to some extent the accuracy of the work, what other information of value may be drawn from it?

The purpose of the balance sheet is to present in concrete figures, statements showing the effect of the period's transactions upon the financial strength of the enterprise, both in the net worth of the business and in the individual assets and liabilities. It is important to know the nature of the assets in which the firm's net wealth is invested, the nature and amount of its debts to others, the comparison not only between the total assets and the total liabilities, but between particular kinds of assets and between particular kinds of liabilities. It is important to know whether the stock of material on hand is abnormally large or abnormally small, whether too large a proportion of the assets is represented by accounts outstanding, whether proper provision has been made for shrinkage in value and for possible losses. In short, the balance sheet tells the management whether correct relations are being maintained between the assets on the one hand and the liabilities and net wealth on the other.

Since the balance sheet thus reveals the condition of

the business, it is one of the most important documents in establishing and maintaining credit relations with banks and other creditors. In fact, the credit manager of a bank or a mercantile establishment, if assured of the accuracy of a balance sheet, will be guided largely by what he finds there in his decision to extend or not to extend the desired lines of credit.

14. *Various forms of balance sheets.*—In England, the standard balance sheet presents the liabilities and net wealth on the left hand side, and the assets on the right (Figure 3). In the United States the order is reversed. Here again the difference in practice is in reality unimportant. Many English accountants agree that the American form is the more consistent, inasmuch as the asset accounts on the ledger present the balances on the left hand side and the liabilities on the right. The English Companies' Act, however, prescribed the other form of balance sheet, and English accountants generally have adopted the form which in the beginning was prepared by lawyers and not by accountants.

There are certain other forms of balance sheets which may be employed regardless of the method used whether English or American. These may be classified under the following heads:

1. Detailed balance sheet,
2. Condensed balance sheet,
3. Comparative balance sheet,
4. Consolidated balance sheet.

A detail balance sheet is usually employed by the smaller concerns. It exhibits every asset, liability and proprietary account on the ledger (Figure 4). In some cases the accounts receivable and the accounts payable are grouped under general descriptive headings such as "accounts receivable" or "accounts payable."

BALANCE SHEET, DECEMBER 31st, 1913

CAPITAL AND LIABILITIES

To Share Capital Authorized—		
100,000 Shares of $10.00 each	$1,000,000.00	
To Share Capital Issued—		
56,630 Shares of $10.00 each fully paid	566,300.00	
960 Shares of $10.00 33⅓% called	3,199.98	
22,500 Shares of $10.00 28% called	63,084.00	
872 Shares of $10.00 25% called	2,180.00	
2,000 Shares of $10.00 21% called	4,347.82	
160 Shares of $10.00 10% called	160.00	
83,122	$639,271.80	
Add Calls paid in advance	12,877.82	
	$652,149.62	
Less: Calls in arrears	$5,995.02	
		$646,154.60
To Premiums on Share Subscriptions— After deducting amounts not called and adjusting calls paid in advance and in arrears		15,667.16
To Sundry Creditors—		
Amounts payable under purchase agreements forming a lien on Real Estate and Accounts Receivable under Sale and Building Agreements	$370,692.42	
Mortgages Payable	9,390.00	
Trade Bills Payable	5,054.24	
Open Accounts	27,846.70	
		$412,983.36
To Bank Loans		49,190.00
To Land Sales Reserve		37,046.00
Reserve Account		96,184.84
To Profit and Loss Account—		
Balance as per Account attached		100,417.26
		$1,357,643.22

Note: There is a contingent liability for Bills discounted of $22,235.00.

PROPERTY AND ASSETS

By Real Estate at Cost			$544,930.34
By House Property at cost (Subject to Mortgage of $3,750.00)			7,856.22
By Store Building			1,569.27
By Building Material, Plans, etc., as per Inventory certified by a Director		$5,305.83	
Deduct: Depreciation on plans		1,000.00	
			4,305.83
By Building Plant, Automobiles, Office Furniture, etc.			
Balance January 1st, 1913		$9,258.08	
Add: Purchases during year		6,991.24	
		$16,249.32	
Less: Depreciation		2,767.63	
			$13,481.69
By Annual Leaseholds at cost			2,371.56
By Investment— 100 shares of Bank of Nova Scotia Stock of $100.00 each at cost (deposited as collateral security			26,500.00
Sundry Debtors—			
Amounts Receivable under Sale Agreements (subject to Mortgages of $5,640.00)		592,169.90	
Amounts Receivable under Building Agreements	$50,141.76		
Amounts Receivable under Building Agreements secured by second Mortgages	50,721.45		
		100,863.21	
Bills Receivable		25,086.61	
Open Accounts	30,908.83		
Deduct: Reserve for bad and doubtful debts	4,460.24		
		26,448.59	
			$744,568.31
By Deferred Charges			167.93
By Cash at Bank and in Hand			11,892.07
			$1,357,643.22

Figure 3—English Form of Balance Sheet.

HIRAM AND CUTTER BALANCE SHEET, DECEMBER 31, 19—

Furniture and fixtures		$5,710.43	A. Coleman & Co.	$896.34	
Clothing on hand		12,406.23	Corbin & Co.	1,432.75	
Shoes on hand		4,913.62	C. H. Lauter Co.	5,620.71	
Haberdashery on hand		5,028.96	Morrell, Howe & Wright	1,045.50	
Norman Clark's note		1,000.00			$8,995.30
A. H. Smith's note		650.00	First National Bank note		6,000.00
Accounts Receivable:			Charles B. Hiram, capital		30,000.00
P. L. Brown	$132.20		Robert Cutter		15,000.00
George Foster	475.00				
L. T. Worth	1,042.00				
Etc., etc., etc.	$26,576.86				
		28,226.06			
Cash		2,060.00			
		$59,995.30			$59,995.30

Figure 4—Detail Balance Sheet.

AMERICAN LOCOMO

Condensed General

June 30,

Cost of property	$51,741,791.57
Securities owned:	
Richmond Locomotive and Machine Works Consolidated Mortgage gold bonds	118,000.00
Sundry securities	495,800.00
	$ 613,800.00
Convertible assets:	
Cash	$ 1,702,268.77
Accounts collectible	9,698,072.97
Bills receivable	817,508.04
Accrued interest	3,514.98
Material and supplies	5,375,900.89
Contract work in course of construction	2,218,812.43
Steam shovels, contractors' locomotives and automobiles manufactured for stock	286,389.99
	$20,102,468.07
Notes discounted (per contra)	$ 2,433,584.25
	$74,891,643.89

Figure 5—Condensed

TIVE COMPANY

BALANCE SHEET

1910

Capital stock:			
Preferred			$25,000,000.00
Common			25,000,000.00
			$50,000,000.00
Bonded debt of constituent companies (For details see pages 13 and 14)			
Richmond Locomotive Works			$ 550,000.00
Dickson Manufacturing Company			562,500.00
Rogers Locomotive Works			305,000.00
Montreal Locomotive Works			1,500,000.00
			$ 2,917,500.00
Current liabilities:			
Gold coupon notes			$ 6,911,000.00
Accounts payable			3,337,707.58
Accrued interest			121,866.68
Unclaimed interest			1,587.50
Dividends on preferred stock payable July 21, 1910			437,500.00
			$10,809,661.76
Endorsements (per contra)			$ 2,433,584.25
Extraordinary additions and betterment fund			689,788.47
Profit and loss:			
Balance June 30, 1909	$7,706,351.09		
Add profit as shown in summary of operations page 6	334,758.32		8,041,109.41
			$74,891,643.89

BALANCE SHEET.

Large concerns usually employ the condensed balance sheet as illustrated in Figure 5. So many accounts are required in order to reflect properly the results of the transactions that it would be impracticable to present them in detail in one balance sheet. For this reason assets of a general nature are grouped under easily identified headings. If, for instance, a company owns four plants in different cities, there would probably be one item in the balance sheet termed "plants." Similarly, a number of different securities owned would be grouped under the general heading "investments." Supplementary statements showing the component parts of the plant or investment accounts, in such cases accompany the balance sheet.

The comparative balance sheet is useful in both large and small concerns. As its name implies, it exhibits each item at the close of the current period as well as at the close of the previous period or of several previous periods. Figure 6 is an example of a comparative balance sheet prepared for the American Agricultural Chemical Company, as reported in the *Financial Chronicle.* The function of a comparative balance sheet is to show immediately any undue fluctuations. A large decrease in cash on hand, for example, would be noted immediately.

The consolidated balance sheet, popular with holding companies, will be explained in Chapter XX.

15. *The assets.*—When examining the assets of a concern, as exhibited in its statement, it is well to remember that no matter how carefully the values there listed may have been computed, there is no such thing as strict accuracy in the balance sheet. In the first place, the entire structure of the accounts is to some extent based upon estimates—especially estimates of the values of the various assets. In the second place, the technical

terms used in the preparation of accounts and accounting statements are not yet standardized. A number of terms such as "treasury stock," "treasury bonds," and the like, are not employed in the same sense by all accountants. Moreover, consciously or unconsciously, the assets in a balance sheet are frequently affected by the influence of the managers of the business. These causes vary in their nature. Occasionally, a balance sheet is prepared for the purpose of obtaining a bank loan, in which case, it is not an unheard-of thing that the owners adopt a too optimistic view when listing the values of the assets. There is a quite obvious tendency, also, to make as good a showing as possible in a prospectus issued to possible purchasers of a new stock or bond issue.

One often finds listed such general and vague assets as "investments," which may include securities of doubtful value; "patents," "good-will," etc., a very common hiding place for exaggerated value; "property account," possibly at original cost values without deduction for shrinkage, or possibly including a large quantity of small tools which should have been included among the expenses. There are times, also, when the values stated in balance sheets are gross misrepresentations. However, the issuing of false statements is illegal, and in most states the persons responsible are liable to punishment.

In reading a statement of assets it is thus important to get at the facts behind the figures. Hence in the course of this chapter and the next we shall attempt to examine the assets of a balance sheet in detail, in the same manner that the average balance sheet would be scrutinized in daily practice.

The arrangement of the assets is of some importance. Three methods are in use:

1. According to liquidity, those assets which can be most readily turned into cash being placed at the head of the list, as illustrated in Figure 2.

2. According to importance, as in Figure 5.

3. According to stability, the most stable asset, such as real estate being listed first, as in Figures 5 and 6.

AMERICAN AGRICULTURAL CHEMICAL COMPANY

BALANCE SHEET JUNE 30

Assets	1914	1913	1912
Land, buildings and machinery	$14,319,790	$13,420,573	$12,494,496
Lighters, tugs, tools, &c.	2,448,495	1,927,304	1,743,953
Stocks and bonds }	4,102,192	3,487,363	{ 2,800,000
Other investments }			{ 50,200
Mining properties	16,975,471	16,778,122	16,803,943
Brands, patents, good-will, &c.	4,141,900	4,128,354	4,034,611
Sinking fund (amt. unexpended)	1,572	2,857	17,047
Accounts receivable	17,571,377	14,964,449	13,442,400
Bills receivable	6,544,934	5,231,488	3,873,902
Merchandise and supplies	9,104,158	8,876,680	8,961,871
Unexpired insur., taxes, &c.	232,432	191,503 }	
Guar. acc'ts receiv., new constr., expends.		}	438,388
chargeable to future op., &c.	770,488	343,427 }	
Cash in bank and in transit	1,274,651	1,419,308	1,485,739
Total assets	$77,487,460	$70,771,428	$66,146,550
Liabilities			
Stock, common	$18,330,900	$18,330,900	$18,330,900
Stock, preferred	27,112,700	27,112,700	27,087,700
Acc'ts payable, accrued int. and taxes	1,871,410	1,024,458	1,026,978
Notes payable	3,213,800	4,825,000	....
First mtge. convert. gold bonds	9,806,000	10,163,000	10,578,000
Debenture bonds	7,000,000	....	....
Reserve for freights, losses &c.	889,754	822,118	883,687
Reserve for renewals, fire ins., &c.	769,929	669,343	642,183
Profit and loss surplus	8,492,967	7,823,909	7,597,102
Total liabilities	$77,487,460	$70,771,428	$66,146,550

FIGURE 6—COMPARATIVE BALANCE SHEET

There are tenable arguments in favor of each of the three methods. The creditor is, of course, interested in the first arrangement, the management in the second, and the promoter in the third. The last mentioned order is the most popular, probably because the stable or fixed assets in most concerns form the greater part of the total

assets and, for that reason, present the concern's condition in more favorable light if placed at the head. In any case, the order adopted should be applied to both sides of the balance sheet. Should the assets be listed in the order of liquidity, there seems no good reason why the liability side should be headed with capital stock, bonds and other long-standing items.

16. *Fixed assets.*—The asset side of the balance sheet usually may be divided into three groups: fixed assets, current assets, and deferred assets or deferred charges. The word "fixed" adequately describes the nature of the assets coming under this group. Land, building, machinery, furniture and fixtures, patents, copyrights and good-will usually are included among the fixed assets. They indicate in a general way that portion of the firm's net wealth which is tied up in property not easily converted into cash. Not all the fixed assets, however, represent proprietorship; usually some part is represented by long term obligations such as bonds and long term notes. Dicksee defines fixed assets as "those *with which* the business is carried on."

17. *Current assets.*—Accounts and notes outstanding, inventories, advances to employés, current investments and the like, constitute a class of assets known as current, liquid or quick assets. Dicksee defines them as "those *in which* the business is carried on." It is this group of assets which determines the firm's ability to meet the obligations arising from day to day, and, in general, to carry on its routine.

18. *Deferred and contingent assets.*—Frequently payments are made in advance for services extending over a period beyond the date of the balance sheet. Insurance premiums, for example, are paid each year in advance for a full year. This also is true of taxes. It

is customary to consider the unconsumed portion of such payments as assets, on the ground that if the business were transferred, the purchaser would obtain the benefit of these services; also on the ground that the true profits and the true condition of the business cannot be set forth unless each period is charged with the expenses strictly applicable to it. Such unconsumed charges are called "deferred assets" or "deferred charges" and, as a rule, are grouped separately in the balance sheet.

Claims for losses sustained by breach of contracts are sometimes included among the assets, although this is not advisable. Whenever they are placed upon the balance sheet, they are regarded as contingent assets.

19. *The liability side.*—The three general classes of assets having now been briefly considered, we turn to the liability side of the balance sheet. This is divided into two parts; one includes the liabilities proper, which must be deducted from the assets in order to determine what the concern is worth; the other is the group of accounts representing the net wealth.

There is not much opportunity for inaccuracy or lack of clearness in stating the liabilities. Unless misrepresentation is employed, or unless the records are improperly kept, it is almost impossible to state the liabilities wrongly. They are not based upon estimates; each obligation contracted is a matter of definite agreement requiring the payment of a specified sum.

The discussion of the arrangement of assets also applies to the arrangement of liabilities, there being differences of opinion as to which is preferable under given circumstances. The arrangement may vary in each particular case since it rests altogether upon the desire to bring out strongly those features which are of real interest, either to the management or to others to whom the

balance sheet is presented. The order here followed corresponds roughly to that employed in treating assets.

20. *Fixed liabilities.*—Liabilities are divided into two general classes: fixed and current liabilities. Bonds, real estate mortgages and other long term obligations constitute the fixed liabilities. Usually they are incurred for the purpose of acquiring fixed assets. By deducting the fixed liabilities from the fixed assets, it is possible to determine what part of the proprietorship is invested in fixed assets.

21. *Current and contingent liabilities.*—Such running obligations as the current bank loans, notes and accounts payable, wages and salaries due, and interest due, are in a general way, compared with the current assets in order to determine the firm's standing so far as the routine business is concerned.

Contingent liabilities are those which it is believed may arise. An accommodation endorsement, for example, should be included under this heading.

22. *Capital and surplus.*—There has been much discussion as to the propriety of considering capital and surplus as liabilities. Those in favor of this view regard the owners of the business as creditors and base their conclusion on the assumption that the business owes to these owners the amount that has been invested and the profits that have been accumulated. The other viewpoint is that the proprietors own the entire business; there is no relation of debtor and creditor between the business and its owners. They are, in fact, one. C. E. Sprague very clearly states the case as follows:

. . . liabilities differ materially from the rights of the proprietor, in the following respects:

1. The rights of the proprietor involve dominion over the

assets and power to use them as he pleases, even to alienating them; while the creditor cannot interfere with him or them except in extraordinary circumstances.

2. The right of the creditor is limited to a definite sum which does not shrink when the assets shrink, while that of the proprietor is that of an elastic value.

3. Losses, expenses and shrinkage fall upon the proprietor alone, and profits, revenue and increase of value benefit him alone, not his creditors.

For these reasons, the proprietary interests cannot be treated like the liabilities, and the two branches on the right hand side of the balance sheet require distinctive statements.

Proprietorship proper consists of two sets of accounts; the first includes the capital accounts, the second the surplus or undivided profits. In the case of a business owned by individuals or partners, the two frequently are combined. The profits are added to the proprietors' accounts as they are determined at the close of each fiscal period; the withdrawals, on the other hand, are charged to their accounts. The plan of keeping the original investment separate from the accumulated profits, however, is gaining more and more in favor. In corporations this method is invariably followed because the capital stock account must be separated from the surplus account.

23. *Reserves.*—There is another form of proprietorship represented in the reserve accounts. Such reserves will be found treated at length in Chapter XXII. For the present it need only be said that in most concerns part of the earnings, instead of being distributed in dividends or thrown into the accumulated profits or surplus account is set aside in what are known as reserve accounts. In theory these reserve accounts accumulate as rapidly as assets shrink in value, or as the

opportunities for contingent losses increase. They are proprietary accounts in the sense that they represent part of the concern's profits that have been so set aside. On the other hand, they are really replacements, and should not in the strictest sense be considered part of the net wealth.

The foregoing discussion will have made clear the importance of the balance sheet as a comprehensive statement of a business. It has shown the various forms employed in presenting its data, and has explained that it consists of two sets of items numerically equal, and that these assets and liabilities may each be further classified. To this latter task, the more detailed classification of assets and liabilities, we now turn. Let us first consider the assets.

CHAPTER III

ASSET SIDE OF BALANCE SHEET

24. *Various bases of valuation.*—Having observed in the previous chapter that assets usually are grouped under three distinct headings—fixed, current and deferred assets—we may now profitably consider some of the various kinds of assets which fall under these heads. Since the popular method of arranging assets is to place the fixed assets first, we shall follow this order here.

Usually, there is ample latitude for the exercise of judgment in establishing the value of an asset. An accurate appraisal is the ideal method, though seldom employed even when the intent is of the best. The accountant is thus often called upon to harmonize as well as he can the conflicting views advanced by the various persons interested. If a balance sheet is prepared to serve as the basis of a loan or a security issue, care must be exercised to avoid too optimistic valuations of the various assets. The banker and the large creditor, on the other hand, may be too severe in their valuations of a debtor's assets. Sometimes, also, assets are undervalued purposely by the management creating a secret reserve [1] for the purpose of preventing a rise in the market price of the company's stock, in this way enabling those "on the inside" to buy in large lots at attractive prices.

[1]Secret reserves are discussed in Chapter XXII.

Even though the accountant may be in a position to exercise his own judgment as to the value of assets, he finds a decided difference of opinion among those in the accountancy profession as to just what are accepted principles of valuation. In fact, there are no definitely fixed standards. This is a fact to be borne in mind when a balance sheet is being examined by one who is not familiar with the details of the business concerned. It is possible to find assets recorded at any one of the following values:

1. Market value,
2. Cost value,
3. Cost value, less shrinkage,
4. Liquidation value.

The last method probably requires some explanation. Liquidation value means an estimate of what the asset would be worth at a compulsory sale. It is not necessary to devote much thought to this method because it is rarely used, except in bankruptcy cases, at which time all the assets of the bankrupt concern are revalued in any event. Accountants almost universally have come to the conclusion that the assets of an enterprise should be regarded from the point of view of a going concern.

Generally speaking, fixed assets are or should be valued on a different basis from that adopted for quick assets. Since fixed assets remain in the possession of the enterprise for a long period of time, it is obvious that so far as the going business is concerned, changes in valuation are not numerous nor violent, except under accidental circumstances. Quick assets, on the other hand, change continuously. Their values, as a rule, are affected by

changing conditions in the market. While, however, the general difference in valuing fixed and quick assets exists, it is necessary always to regard each particular asset by itself. Occasionally it seems advisable to apply to a fixed asset the same rules of valuation that are applied to a quick asset.

It may be said, in a general way, that although the purpose of accounting is to present facts as they are, bringing to bear as little as possible of the personal element, conservatism in valuing assets on a balance sheet may be regarded as a merit, rather than a fault. Hatfield, in his book, "Modern Accounting," cites an English case in which the courts held that "the purpse of the balance sheet is primarily to show that the financial position of the company is at least as good as there stated, not to show that it is not, or may not be better." [1]

25. *Land and buildings.*—Land, of course, is the most permanent asset owned by a business enterprise, unless it is bought for resale; in the latter case, it would be considered in the same light as merchandise bought for resale.

The value of land as stated on the balance sheet may depend upon two factors; the original cost, and subsequent changes in valuation. The original cost is fairly well fixed; the only question that may arise is that of including in the cost the legal and other incidental expenses. As a rule, these expenses are only a small percentage of the total cost of the land, although they are often important enough to be considered. The conservative method is to charge such expenses against the current year's profit, although accounting authorities favor the practice of considering them part of the cost. There seems to be no more reason why this should be done than that the expense of maintaining a purchasing depart-

[1] Newton vs. Birmingham Small Arms Company (1906) 2 Ch. 378.

ment should be included in the inventory of raw material. The current practice, however, is to include the cost of searching title, legal fees, and such expenses in the cost of the land, and this practice is supported by so able an authority as Henry Rand Hatfield.

Subsequent changes in the value of land should not be considered, since in order to add such increases to the book value of land, it would be necessary in double entry bookkeeping also to add the increase to some income account. In this connection there is an inflexible rule in accounting practice that profits are not earned by writing up the value of assets, hence such a practice would be distinctly wrong. As we shall see later, to increase the value of an asset would mean the creation of a "paper profit," while as a general principle it is agreed that profits should not be considered until they are earned. There is some justification, however, for writing down the land values if neighboring lands clearly have fallen in market value, although the only good reason for this could be the desire for conservative valuation. To a going concern land is considered as valuable one day as another.

Some merchants and manufacturers feel that the interest payments on land mortgages should be charged to the value of the land. This is clearly unjustifiable. Such interest payments do not represent original cost nor additionally acquired property. The view at times advanced that these interest payments are about equal to the increased value of the land, is untenable. In the first place, it is extremely doubtful whether the interest payment and the increase in land value are equal; in the second place, as has already been said, increased land valuations should not ordinarily be considered in the book records; and, finally, the interest in effect consti-

tutes rent paid for the use of the property, and as such is a current expense.

In real estate and development companies, where land is bought in large blocks to be resold later, all the expenses incident to acquiring, carrying and developing the land, must be included in the cost value for the purposes of establishing the proper selling prices, just as the expense necessary in conducting a manufacturing establishment must be added to the cost of the raw material in order to establish selling prices that will return a suitable profit to the manufacturers.

Buildings are placed in the same category as land. The principal differences are that buildings depreciate from wear and tear and from the action of the elements; also that additions are frequently made, the value of which must be added to the book value of the original building. The depreciation is a tangible, calculable reduction in value, which, unlike possible reduction in land values, must be taken account of, because the deteriorated property eventually must be restored. No matter how low the market value of land may fall, if the land serves the purpose of the business, no further expenditure is necessary to maintain it, while buildings, on the contrary, require actual expenditures for repairs and renewals. Obviously, then, unless the buildings are relatively new, the balance sheet which carries them at the original cost price and without provision for deterioration, indicates excessive valuation. To the same end, the management should insist upon a conservative policy in evaluating its buildings.

The question of including the value of additions to already existing buildings, is one that calls for a final distinction between capital and revenue expenditures. A discussion of this subject is contained in Chapter XXI.

For the present, it is sufficient that we remember that general principle that the cost of actual additions—not direct replacements—may legitimately be added to the value of the original building.

26. *Machinery and tools.*—When a piece of machinery is purchased, its cost may reasonably be said to be its original value to the concern installing it, but from the moment it is put in use, a process of deterioration begins to take place. At times this deterioration is so slow that the machine lasts many years; at others, through hard wear or the advent of improved types of machinery, its period of usefulness is short. Depreciation in all cases does take place, and, whatever be the rate, should be provided for. Unless the machinery is new, a balance sheet exhibiting machinery at its original cost price presents a false financial condition in so far as that particular item is concerned.

An involved question frequently arises in placing upon the books the value of a new machine. Incidental to its installation, there are expenses such as carting the machine from the freight depot to the factory, building concrete foundations for it, connecting it with the transmission, and the like. Are these expenses to be considered part of the value? There is some difference of opinion, but the general practice is to adopt the affirmative point of view. The reason for this is that a machine standing in the middle of the street could hardly be of value to a going manufacturing concern. Not until it is in place, ready for use, is it really a productive factor in the establishment. Moreover, the machine could be sold for a higher price to a purchaser who could use it in its present position than to one who would be obliged to remove it to other premises. The machine in its proper position may be said to have place utility.[1]

[1]See Volume I

Similar questions arise in the case of moving a plant from one building to another. Ordinarily the cost of such a change is high. Is the firm justified in considering these expenses as additions to the already existing values? Professor Kimball in the text on "Cost Finding" in Volume VII holds the view that such removal expenses, strictly applicable to the work of moving machinery, is a legitimate addition to the value of that machinery. While this practice is general, there are authorities who strongly hold that it is more correct to eliminate from the original values the expenses incurred in installing the machinery in the old building, as otherwise the machinery is loaded down with the cost of two installations, one of which has become valueless.

Tools which are fixed and which in reality enter into the same category as machinery, should be valued in the same manner. Small tools, however, unless the aggregate is large, should be considered as current expenses. Where there are a great many, it would be better to consider them as supplies and so list them in the inventory.

27. *Patterns, drawings, plates, etc.*—In most manufacturing concerns, there is an accumulation of patterns, drawings, lasts, dies, molds and the like, many of which have become obsolete. Unless care is taken, there is a danger of accumulating the values of such assets upon the books, as well as accumulating the assets themselves in the shop. Many publishing houses still list among their assets plates for books which have long since gone out of print and for which there is no longer any real sale. It is true that there is a possibility of selling the plates and copyright to some other publisher, yet in the majority of instances even such possibility of resale is extremely remote.

Assets of this character, as a rule, are short lived. Pat-

terns are soon superseded by newer styles; books, unless they are standard works, quickly pass from popularity. On the other hand, while the styles or books are in demand, such assets may be of considerable value. In view of these facts, a sound and conservative practice is to place them upon the accounting records at actual cost and reduce their book value considerably from time to time.

28. *Furniture and fixtures.*—In general, what was said of buildings as assets also holds true of such property as furniture and fixtures. The terms are self-explanatory, though it may be added that "fixtures" usually includes partitions, cashier's cages, electric fans and the like. Such assets depreciate rapidly in value and should be carried on the financial statement at very conservative figures.

29. *Patents and copyrights.*—It is often hard to convince an inventor that commercial practice demands that the child of his brain to which perhaps he has devoted many years, be valued at very much less than its real worth. An invention does not always assume the importance to the public that it does to the inventor himself. Many patents like those of the National Cash Register, Burroughs Adding Machine and Wright Aeroplane are worth millions each. The Eastman Kodak Company includes among its assets patents and good-will valued at many millions. On the other hand, many patents which in the beginning seemed worth millions have long since become worthless.

In general, one is obliged to conclude that a patent is an asset of questionable value. Usually, it is purchased from the inventor for a definite sum, either in cash or in stock. It is perfectly right and just that the price actually paid for a patent be the measure of its

value to the business, and that this value be stated in the financial statement. It is not good practice, however, to add to this original cost additional amounts which by reason of increasing sales may seem proper. Here again, we must guard against making "paper profits."

It is a question whether the cost of conducting infringement suits should be added to the value of a patent. If the patent is of commercial value and clearly could be sold to some other concern at its original cost price, plus the expenses of defending it in the courts, it would seem to be proper to place the value of the combined costs upon the books, rather than to burden the expense account with the law suit costs. But a patent may not continue to be of so much value five, ten or more years hence. In the United States, the legal life of a patent is only seventeen years. It should be reduced in value during that period until at the end, it is eliminated from the books or covered by a reserve. Prudent management demands, as a matter of fact, that the value of a patent be wiped off the books long before the expiration of its legal life. Competition and new inventions may force a sudden slump in its value. We have instances of typewriter and calculating machine patents which although once valuable, have since been rendered unmarketable by competitors who have produced better machines or have adopted better sales methods. Patent rights, then, should be depreciated liberally each year.

The same holds true of copyrights. A copyright, under the United States Act, is good for twenty-eight years, and the holder, at the end of that period, has a renewal privilege for an additional twenty-eight years. The price paid for the manuscript and for editing it may properly be included in the value of the copyright. But

this value should be written off within a relatively short time for the reasons stated in section 27.

30. *Good-will.*—No one will deny that an enterprising, successful business which has been in existence for a number of years has created an intangible asset, a sort of business momentum or trade following, which gives it an advantage over competitors. This asset, the value of which may run into extremely high figures, is commonly known as good-will. Should the business be sold, it is quite proper to ask the purchaser to pay a sum in excess of the net tangible assets for this intangible value created by years of successful business operations.

Good-will is at best extremely difficult to measure; it is just as easy to be too optimistic as it is to be too conservative—in fact, a little easier. Few business men consider it prudent to add a certain amount to the stated assets to represent its increasing value, and most accountants advise writing off good-will as soon as possible. It is sometimes disregarded altogether in gauging a concern's credit title.

These and other problems concerning good-will are discussed more fully in a later chapter. For the present it is sufficient to remember that good practice prohibits including among a concern's assets good-will for which actual payment has not been made. This may seem illogical. Yet it is declared that unless this practice were strictly adhered to, we should have more than ordinary difficulty in determining whether the value attached to good-will, as it appeared on a balance sheet, were actually justified. As Mr. Hatfield puts it, "The boy's jack-knife, the citizen's fatherland, the man's children, are in normal cases a little better than similar possessions of anyone else."

31. *Investments and sinking funds.*—A sinking fund,

as we shall see in Chapter XXII, is actually an asset in the form of a separate bank account or an investment of some kind. When sinking funds are created, the usual practice is to purchase gilt-edged securities or the securities for which the fund is created. For that reason, sinking funds might be classed with ordinary investments, although commonly they appear as separate assets in the balance sheet.

It is not always clear and sometimes very difficult to determine whether investments, as they appear upon a balance sheet, are to be classed under fixed assets or under current assets. In general, it may be said that securities which it is expected may be held for a long time—for example, stock of a subsidiary company—may be regarded as fixed assets. A short time investment, either purchased for the purpose of realizing an opportune profit, or taken over in liquidation of a debt, should be regarded as a current asset.

Unlike the assets we have so far considered, in which cost price and cost price less shrinkage have been the determining factors upon which the valuation was based, the value of investments depends to a very large extent upon the market prices. Securities sold in the open market fluctuate in price—the quotations varying from day to day, sometimes very radically. The business man and the accountant are then confronted with this question; inasmuch as there is a value established by the market for the securities we own, is it not proper to adopt this value upon our own books?

Obviously, it would be inconvenient and impracticable to attempt to change the book values of securities from day to day. The question really has force when the periodical financial statements are being prepared. In the case of long time investment, changes in value are

rarely made at such times unless the value has definitely fallen and reduction is likely to be permanent. Securities which are regarded as permanent investments are, so far as the concern owning them is affected, to all intents and purposes as valuable one day as the next. This condition is changed only when the income from the securities is lowered. Under other circumstances, it is clear that the periodical profits of the company are not affected by current fluctuations in the market prices of securities which will be held for any length of time. The company is just as rich to-day as it was at the time the securities were purchased, hence no change in the asset value need be made.

Investments which are held for the purpose of selling as quickly as profit can be realized, must be regarded as current assets, and under that classification are subject to the general rule of valuation that applies to most current assets—that the cost price govern the value of the asset, unless the market price is lower, in which case the market price should be adopted. This is a general rule, subject, of course, to many exceptions, especially in cases where the value is definitely fixed.

Investments held for a short time, however, clearly are subject to the general rule. If, for example, a concern acquires $10,000 worth of stock, let us say in liquidation of a debt, at a ruling market price of 95, it would be justified in entering the stock at a valuation of $9,500. If the stock is one which is traded in merely at the market, it is possible that at the next closing of the fiscal period, the price may be $9,000 and that at the closing following, it may be $9,700. In such a case, it is wise to carry the stock at the $9,500 paid for it, but to indicate on the balance sheet its value according to the current market. If, however, there is a distinct downward tendency in the

price of the security, the best practice demands that a reserve be provided to take care of the shrinkage in the market value.

In no case is it wise to increase the value of securities, and thereby create a profit before they are sold. The reasons are similar to those mentioned in section 25 in which fluctuating land values were discussed.

32. *Leaseholds.*—Ordinary leases, whether the property is rented to or from an outsider at definitely stated terms without payment of premiums of any kind, are not recorded upon the books. Occasionally, however, a concern may purchase a lease, the purchase price of which includes a premium based upon the income expected from the property. In such a case, the purchase price determines the value at which the acquired asset is placed upon the books. As the period of the lease diminishes, the value of the lease necessarily declines. Accordingly, the practice is to write off a definite part of the value, according to one of three methods discussed in Chapter XXII.

33. *Accounts and notes receivable.*—Money due from customers or from individuals whose notes are held, is definitely stated by contract. Under ordinary circumstances, therefore, the value of accounts or notes receivable is established. A question arises only when an account or note becomes overdue. It then quickly falls into the class known as "doubtful." If, after an attempt to collect the account, it still remains unpaid, it is considered "bad." There are no definite rules as to when an account becomes doubtful or bad; the custom of the trade and circumstances must be considered.

In a properly prepared balance sheet, doubtful and bad accounts are separated. Overdue notes, also, are separated from the notes considered good. It is the

usual custom to set aside from the profits each year a definite amount to provide for notes and accounts that may become uncollectible. Where such a practice is maintained, it is necessary only to determine whether the amount set aside is sufficient. Where, however, notes receivable and accounts receivable are shown without distinction between good, doubtful and bad, and without provision for losses due to uncollectible accounts and notes, it is quite likely that investigation will reveal an over-valuation of such assets.

34. *Inventories.*—The general rule applying to the valuation of current assets, namely, that of taking the cost price unless the market price is lower, applies particularly to inventories of material and supplies. The market prices of these goods often fluctuate violently, as in the case of rubber. The rule probably is adopted from the German law which specifically prescribes that the cost price of merchandise must be taken as the inventory value except where the market price is lower, in which case the latter governs. It might, of course, be argued that if the market price is higher, the increase should be taken into account. But here again, the principle of not recording profits until the goods are sold must be followed. We find this principle running through the entire accounting structure. It is well that this is so, for otherwise we should have a confusing mass of values and a wholesale distribution of unearned profits.

In some industries where the sales prices are definitely fixed and are not affected by the market prices of the raw material, doubt arises as to the wisdom of entering merchandise at anything other than the cost price. Here it may well be held with some degree of truth that there is no advantage in reducing the value of a stock of mer-

chandise only to make up the reduction by the greater difference between the selling price and its market value. On the other hand, there is a temporary advantage at the time the financial statements are prepared, in that the firm's financial status is more conservatively stated. At any rate it is certain that if the general rule is strictly adhered to, there can be very little question as to the justice of inventory values, at least from the outsider's point of view.

Supplies, small tools and the like should be governed by the same rule except that in the case of small tools which have been used, a liberal amount for depreciation should be deducted.

35. *Advances to employés.*—Occasionally, it is necessary to advance sums to salesmen and other employés for expenses, on account, as a loan, or on salaries or wages. No doubt can attach to the value of such advances except in cases where employés have left the concern and it is questionable whether they will return the money advanced. Conservative practice in such cases is to write off the amount at the expiration of a very short period.

36. *Accruals.*—Rents and interest on bonds and notes, of course, accrue from day to day although the amounts may not be due until three or six months hence. Thus in the case of a bond the interest dates of which are January 1st and July 1st there will at the first of March have accrued two months' interest. It is not usual to consider such interest until it is paid, although this is done in some large concerns where the amount is considerable. Obviously, the practice is legitimate for such accruals are clearly assets in the hands of other persons.

37. *Deferred assets.*—This class of assets has already been discussed in section 18. Payments which have been

made and which are chargeable to the next accounting period, are definite measures of the values at which they should appear in the balance sheet. The only question here is one of mathematics—that is, whether the division between the amount chargeable to the current period and the amount chargeable to the next period has been properly made.

NOTE—For explanation of Treasury stock, see Chapter XVIII on "Corporate Accounts," Section 199.

CHAPTER IV

LIABILITY SIDE OF BALANCE SHEET

38. *General points to consider.*—The question of value as applied to liabilities can scarcely be said to arise. The problem here, assuming that *all* the liabilities are shown, is largely one of arrangement and classification. We have already seen that the right-hand side of the balance sheet (in American practice) consists of two parts—liabilities and proprietorship. Whether the right-hand side is headed "Liabilities," "Capital and Liabilities" or "Liabilities, Capital and Reserve" is of no particular moment, so long as all the information is present.

There has been some discussion as to the advisability of deducting liabilities from the assets to which they are opposite. For example, some authorities hold that a mortgage on real estate should appear on the asset side of the balance sheet, deducted from the total value of the real estate owned. This is a question for the accountant and does not particularly concern us so long as we are able to ascertain from the balance sheet, as it is exhibited, that the real estate owned amounts to so much, and that there is a mortgage against it for a certain amount. The general practice is to place all the liabilities on the liability side.

39. *Classes of liabilities.*—Liabilities proper, i. e., the amounts owed by a concern, are divided into three classes —fixed, current and deferred. This division is of considerable importance, for it enables us to determine the

financial strength of the company. We know, for instance, that the fixed liabilities will not mature immediately and by comparison with the asset side we can ascertain what fixed assets are available to meet the long time liabilities when these mature. The current liabilities indicate the amount of obligations which must be met within a short time, and by comparing this amount with the current assets, it is possible to determine easily the concern's ability to meet this class of maturing obligations.

40. *Bonds.*—Among the liabilities which remain upon the books for a long time, bonds are the most prominent. The board of directors of a corporation usually authorizes the issue of a certain class of bonds for a definitely stated amount, but frequently part of the issue is not sold. In such a case, the practice is to indicate on the balance sheet, among the actual liabilities outstanding, the amount of the bond issue authorized, to deduct from the total the amount unsold, and to show the net amount issued. This, however, is not always done, leaving some doubt in the mind of the person examining the balance sheet as to whether the full authorized issue of bonds has been disposed of.

In the Volume on "Corporation Finance" (Volume VIII) are discussed a number of different kinds of bonds. The balance sheet should indicate clearly just what kinds of bonds have been issued; merely to state "Bonds $1,000,000" does not provide sufficient information to the person who reads the balance sheet. He should be able to tell whether or not the bonds are a first lien on the property, on what kind of property they are a lien, whether they are second liens, what the interest rate is, and so on. This information can be given by adopting a comprehensive title.

Sometimes bonds are sold at a premium. This premium, of course, is a profit, but is usually not credited to the current year's profit. It is carried as a deferred liability—as opposed to a deferred charge—and is credited from time to time. More often bonds are sold at a discount, in which case the discount is carried on the asset side as a deferred charge, and is written off during a much shorter period than is the premium.

Bonds are often sold with the privilege of being redeemed at a premium after a specified period of time. If the intention is to make such redemption, the premium becomes a liability which should be provided for by creating a liability account for that purpose, and charging the profits of each period with a part.

41. *Real estate mortgages.*—Mortgages are another class of bonds. In fact, as explained in Volume XI, "Insurance and Real Estate" and Volume XII, "Commercial Law," the mortgage itself is not an evidence of the obligation; it is a conditional deed. The bond accompanying the mortgage is the actual instrument which is evidence of the promise to pay. No particular problem arises in connection with recording the real estate mortgage, or any other mortgage, for that matter. Such liabilities, however, should be clearly described in order that their nature may be easily understood by the person who examines the balance sheet.

42. *Accounts and notes payable.*—Of current liabilities the most important are accounts and notes payable. They represent the obligations incurred by reason of the current trading activities, and the problem arising in connection with them is that of fully and clearly stating the amount due on accounts and on notes.

43. *Bank loans.*—The average concern has established relations with one or more banks for occasional

loans. These loans usually are of short duration and are of the same nature as notes payable.

As a rule the loans are made on unsecured notes; frequently, however, security of some sort is required. In such cases, the borrower secures what is known as a collateral note, by turning over to the bank possession of certain property with the right to assume title if the loan is not paid. From the accounting point of view, such a transaction is handled by permitting the asset to remain on the books, but indicating on the liability side of the balance sheet that the loan is a collateral loan and stating what assets have been pledged as security.

44. *Accrued wages and salaries.*—Frequently the end of a month or of the accounting period falls a few days prior to the payment of wages or salary. In such a case, the amount accrued up to the date of accounting, but not due, is shown in the balance sheet as a liability. The reason for this is evident. If on that date a concern were to dispose of its business, the purchaser should be informed as to the full amount of liabilities then outstanding and later becoming due.

45. *Accrued interest.*—Similar accruals of interest on outstanding obligations should be shown on the balance sheet. There is no special problem to be solved here. It is necessary only to calculate and indicate the amount of interest which has accrued to date but which is not yet due.

46. *Deferred liabilities.*—The term "deferred liabilities" is really a misnomer. It includes profits that are not properly to be credited to the current year's profits but to be carried over to the next period, or distributed over a number of periods. For that reason, a deferred liability, rather than actually being an obligation, is a source of profit merely withheld from the current year's

earnings. We have already mentioned that premiums on bonds sold is a deferred "liability."

47. *Reserve for depreciation.*—The various items which have just been considered belong to the first division of the liability side of the balance sheet, i. e., to liabilities proper. It now remains to consider the second division, those items which pertain to proprietorship. The use of this term was explained in section 22.

Proprietorship is composed of several elements, prominent among which are the various reserves. These reserves appear upon the liability or right-hand side, because they are off-shoots from the profit or surplus accounts. They represent amounts withheld from profits for special purposes, and their presence in general is a sign of foresight upon the part of the management.

Practically all fixed assets depreciate as time goes on; and unless a part of the profit is set aside periodically for the purpose it will be necessary to burden the year during which the asset is replaced with the total loss of the old asset. Such a practice causes an abnormal shrinkage in that year's profits as compared with the profits of other years and it does not give an accurate view of the business. Hence depreciation is a subject of much importance. and will receive due attention in a later chapter.

48. *Reserve for bad debts.*—Among the reserves is also the provision for bad debts referred to in section 33. The problem here is one of ascertaining that the reserve is sufficiently large to provide for all the debts that may occur. The only basis that can be used with any degree of accuracy for this purpose is past experience. It may be said, also, that it is better to create too large a reserve than one that is too small.

49. *Contingent reserve.*—In almost every business,

unforseen losses occur from time to time. It may be, as in the case of a protested note, that the likelihood of a loss is known to the management. But at any rate, all such losses are regarded as contingent. In providing for them, it is the practice in some instances to create a contingent liability as soon as it becomes likely that such a loss may be sustained. More often, a reserve for contingent losses is established, providing also for such losses as do not yet give evidence of occurring.

50. *Capital.*—While, as already has been said, these reserves form a part of the proprietary interest, they are also in a sense liabilities. For assuming that the reserves have been accurately calculated, they really do represent a shrinkage in the assets, which, of course, cannot be regarded as existing wealth. For that reason, although we may, for the sake of convenience, regard reserves as part of the proprietary interest, it must be remembered that, strictly speaking, they are in a class by themselves.

The actual proprietorship is represented by two accounts; one, capital stock, and the other surplus or undivided profits. These two classes of accounts combined represent what is left over after the liabilities and reserves have been deducted from the existing assets.

The accounts maintained for individual proprietors indicate exactly what interest each proprietor has in the business in addition to his share of the undivided profits. They are established by crediting each partner with the amount of money he invested in the beginning and from time to time, also by crediting him with his share of the profits and charging him with his withdrawals.

Capital stock is represented in the balance sheet in several ways. In the first place, it must be remembered that the authorized issue of capital stock is a legal pro-

cedure and cannot be altered without permission from the state authorities. Occasionally, more than two kinds of stock are issued. Ordinarily, there are two, common and preferred. As in the case of bonds, all the stock may not be sold. There usually remains some unissued stock which frequently erroneously is termed "treasury stock." [1]

One method of listing capital stock in a balance sheet is merely to show the amount of capital stock outstanding, without description and without reference to the amount authorized. Another is to separate the common from the preferred stock, showing the amount outstanding of each. The third and most common method is to separate the common from the preferred and to show the amount authorized, the amount unissued and the amount outstanding of each.

51. *Surplus.*—Profits are made to be distributed among the owners of the business. In a corporation these owners are the stockholders, and in such cases the distribution of profits is called "dividends." As we learn in the volume on "Corporation Finance," it is not wise to distribute all the profits. A part should be withheld for the purpose of creating reserves such as we have discussed and a part for a general reserve which is known as surplus. This surplus is maintained for a number of reasons—to enable the company to distribute profits equally each year, regardless of the actual profits of that year; to provide for unseen calamities; to provide for extending the business without the need of additional capital; and other purposes of like nature. In some cases, the surplus is equal to the capital and at times it is even larger. We find this condition existing in banks particularly. A reserve should properly rep-

[1] See Chapter XVIII "Corporate Accounts."

resent an accumulation of profits. Occasionally, however, this is not the case. Sometimes the surplus is created by increasing the value of some assets that may have increased in market value, and is prompted by the desire to exhibit a stronger financial condition. Such a course, whatever the reason, is not considered conservative, nor safe financing; certainly it is not in accordance with the best accounting practice.

For the present, it is not necessary to analyze carefully the profits and surplus.. These phases of the subject present a number of questions, which are discussed in Chapter V. It is only necessary to remember the general nature of surplus in order to determine its status and its relation to the other items in the balance sheet already mentioned.

In passing, it might be added that dividends which have been declared but which are not paid, are legally a liability of the company and should be included under current liabilities—not in surplus.

52. *Summary.*—The balance sheet is intended to present as accurate an account as possible of the financial standing of a business enterprise. In former years, it was regarded as a mysterious document which only an expert could unravel. In fact, an examination of some of the old balance sheets would lead one to believe that a deliberate attempt was made to surround it with as many technical terms as possible. Today, the tendency is to describe each element in the balance sheet in easily understood English, so that the average business man, without a knowledge of the technical details of accounting, can quickly comprehend its significance.

Our general discussion of the balance sheet, while not intended to be exhaustive, will provide a basis upon which we may continue our examination of accounting

methods. We are now ready to examine another of the important financial statements—the profit and loss statement—which, when combined with the balance sheet, presents a very interesting account of what has occurred within the business enterprise.

CHAPTER V

PROFIT AND LOSS STATEMENTS

53. *Ascertaining the profit or loss.*—Since a business enterprise is operated for profit it is natural that the persons interested in it should desire to know what profit has been made or what the loss has been. To obtain this information, an elaborate set of books is not really necessary. The only requirements are an accurate list of the assets and liabilities at the beginning of the period, another list of those at the end, and a list of the amounts withdrawn for dividends or for the personal use of the partners. Manifestly, if at the end of the period the excess of assets over liabilities—in other words, the net assets—is greater than the excess at the beginning of the period, the concern has been operating at a profit.

In a certain business the net assets at the beginning of the year were $50,000. At the end of the year, they had increased to $75,000, so that the concern was $25,000 richer. This increase in its wealth must have been due to its operations during the period; hence it represents a profit. We also find that during the year $10,000 has been withdrawn for distribution among the owners. In other words, some of the profits were distributed before the amount of total profits was ascer-

Beginning of Year		End of Year	
Assets..............	$100,000	Assets............	$150,000
Liabilities...........	50,000	Liabilities.........	75,000
Net assets or proprietorship........	$50,000	Net assets or proprietorship......	$75,000
		Withdrawn..........	$10,000

tained. Naturally, this $10,000 must be added to the $25,000 to determine the total profits for the period.

If, on the other hand, the net assets at the close of the year had been $35,000 and $15,000 had been withdrawn by the proprietors for their personal use it would be evident immediately that the operations had resulted in neither profit nor loss. The amounts withdrawn by the owners would have meant a reduction in the capital.

Again, if nothing had been withdrawn and the net assets had fallen to $15,000, our conclusion would have been that a loss of $35,000 had occurred.

In this way we might take any concern's balance sheet at the end of two succeeding periods and by comparing the proprietorship and ascertaining the amount of withdrawals, determine what has been the profit or loss.

54. *The profit and loss statement.*—This method of determining the profit, however, though accurate as to the final results, does not provide us with information as to *how* the profit or loss was brought about; and this is vital information. The assets and liability method, as the foregoing calculation is called, is useful in arriving at results before the financial statements have been prepared, or afterward in verifying the results exhibited in the financial statements. It is necessary, in addition, to prepare some kind of statement which will tell us the sources from which revenue was obtained, how much of this revenue was relinquished and for what purposes. Unless this information were available, it would be difficult to determine whether the goods were sold at high enough prices or whether enough goods were sold, whether the cost of manufacturing was normal and, in fact, whether or not the expense of operating the various departments in the enterprise were in proper relation to

the income. The statement which contains information of this nature is known as a profit and loss statement, or profit and loss account.

55. *Old account form.*—On page 58 is shown a profit and loss account such as bookkeepers used to prepare several decades ago. The statement as it appears there is an exact transcript of the profit and loss account as it appeared in the ledger.

Without attempting to describe the operation of a ledger at this stage, it may be well to point out that it is a classified record, in which are entered the results of all the firm's transactions. It is composed of a number of accounts, each conveying some specific information of a special character. Thus, one account will indicate how much real estate is owned, another how much has been spent for labor, another how much product has been sold, and so on. The profit and loss account is a gathering place to which all the sales and other revenue items, costs and expenses during the period, are eventually transferred. The revenues are placed on one side and the costs and expenses on the other. Simple additions and subtractions are made to determine whether the revenues have been greater than the outgo or vice versa. The difference is placed on the smaller side and the two sides are then in balance.

In the example on page 58 we find sales $92,930.00 the only revenue item. This has been transferred from the sales account. From the sales must be deducted labor, factory expenses, salaries and all the other costs of operating the business. The merchandise actually consumed is found by adding the goods on hand at the beginning of the year to the purchases and deducting from the total the merchandise on hand at the close of the year. In this case the closing inventory is added to

the sales effecting the same result as if it were subtracted from the combined purchases and original inventory. Since the revenue was greater than the costs and expenses, we have a profit which is added to the costs and expenses, making the two sides of the account balance.

GEORGE J. CLARK

PROFIT AND LOSS ACCOUNT

Inventory, Jan. 1....	$14,320.00	Sales.............	$92,930.00
Purchases...........	32,500.00	Inventory, Dec. 31.	16,762.00
Labor...............	6,480.00		
Factory expenses....	3,280.00		
Postage.............	316.00		
Traveling expenses...	6,014.25		
Officers salaries......	15,000.00		
Clerical salaries......	4,500.00		
Commission.........	6,300.00		
Miscellaneous.......	1,280.00		
Profit..............	19,701.75		
	$109,692.00		$109,692.00

FIGURE 7—OLD FORM PROFIT AND LOSS ACCOUNT

A profit and loss account of this character is the bookkeeper's method of saying that cost plus profit is equal to revenue or, conversely, that cost is equal to revenue plus loss. In other words, it is a simple mathematical calculation expressed in account form.

This kind of statement has all but passed from existence because it serves no other purpose than to present the calculation just referred to. The facts are not arranged in such a way as to convey to the proprietors any other information than that the profit and loss was so much. They do not learn, unless they make further investigations and calculations, how much it cost to manufacture the goods, how much it cost to sell them, and

how much to operate the administration. In small establishments this information can easily be obtained without the aid of more elaborate statements, but in larger concerns it is advisable to present such vital information in the statements themselves.

56. *New account form.*—The next step, then, was to prepare the profit and loss account in such a manner that upon the face of the statement vital information as to the various groups of costs and expenses and their relation to revenues would be apparent. The form described in the previous section was developed into a series of three different accounts—the manufacturing, trading, and profit and loss accounts—which taken collectively, serve the same purpose as the old form. On pages 60 and 61 will be found an example taken from Greendlinger's "Accountancy Problems," Volume I.

The manufacturing account exhibits clearly just how much it costs to manufacture the goods that were sold. It will be seen that the raw material (yarn), wages, and other expenses of manufacturing are separately given. The proprietors have before them a complete statement of the situation. They are in a position to compare the various items with similar items in previous periods and to compare the cost prices with the prices that would be charged by other manufacturers were they to buy the finished product instead of making it themselves. It will be noticed that "yarn (used)" is stated as one of the costs. This cost is found by the same process of deducting the closing inventory from the total of the beginning inventory and purchases, already explained. In most cases this calculation is shown in the account, as will be seen in further examples to which we shall have occasion to refer later in this volume.

To find the cost of selling and the resulting profit, a

MANUFACTURING ACCOUNT OF THE A. B. MILLS, FOR THE PERIOD ENDING DECEMBER 31, 1906

To Yarn (used)	$25,000.00		By Cost of production		$64,870.00
Wages	22,500.00				
Dyeing	12,500.00				
		$60,000.00			
Power, light and heat	$3,125.00				
Repairs	685.00				
Sundry expenses, including depreciation	1,060.00	4,870.00			
		$64,870.00			$64,870.00

TRADING ACCOUNT

To Cost of production		$64,870.00	By Sales	$81,250	
Advertising	$1,250.00		Less returns	1,000	$80,250.00
Traveling expenses	1,125.00				
Boxes and Cases	1,250.00				
Commissions	1,875.00				
		5,500.00			
Gross profit		9,880.00			
		$80,250.00			$80,250.00

PROFIT AND LOSS ACCOUNT

To Insurance	$155.00		By Gross profit	$9,880.00
Salaries	2,500.00			
Taxes	310.00			
Depreciation on furniture and fixtures.	425.00	$3,390.00		
Net profit on trading		6,490.00		
		$9,880.00		$9,880.00
To Discount allowed		$440.00	By Net profit on trading	$6,490.00
Interest on loans		410.00	Discount received	2,500.00
Net profit (surplus)		8,140.00		
		$8,990.00		$8,990.00

FIGURE 8—NEW ACCOUNT FORM OF PROFIT AND LOSS STATEMENT

trading account is prepared. Here the sales are shown on one side, while on the opposite side the cost of the goods and the expenses incidental to sales activities are listed. The difference between the two sides is the gross or trading profit. This profit must be large enough to pay the general expenses of administration and a profit to the proprietors.

In the next section of the statement the profit and loss account is employed to show how the gross profit is disposed of and to exhibit the net profit. In this case we find that the expenses of administration were $3,390.00, leaving a net trading profit of $6,490.00. To this is added $2,500.00, which was earned by discounting our bills—a source of income apart from the prime purpose of selling cloth. Interest and discount charges are deducted from this total to find the net profit available for distribution among the proprietors.

This illustration of the new account form applies to a very simple case. There are several variations in the methods of preparing these accounts, adapting them to the requirements of the case. The underlying principle, however, is essentially the same in all cases; that is, the manufacturing, trading, and profit and loss sections are separately prepared and arranged in whatever manner will present the desirable information.

57. *New statement form.*—This new account form, as may be inferred from the preceding discussion, arose out of the desire to remove from accounting statements those technicalities with which only the accountant is familiar. A further step in this direction resulted in the adoption by many public accountants of the new statement form. The reader will find this form employed in most of the annual reports issued by corporations. The United States Steel Company, Bethlehem Steel Com-

pany, American Car and Foundry Company, and American Locomotive Company may be cited as examples. An illustration, taken from Greendlinger's

PROFIT AND LOSS AND INCOME STATEMENT

Sales				$540,000.00
Freight and express outward			$935.00	
Return sales			8,463.00	9,398.00
Amount received from sales				$530,602.00
Purchases			$195,670.00	
Freight and express inward			7,433.00	
Inventory, 7/1/9	$33,480.00			
	9,760.00	$43,240.00		
Inventory, 6/30/10	$27,698.00			
	11,590.00	39,288.00	3,952.00	
Cost of goods sold			$207,055.00	
Wages			232,927.00	
Prime cost of Material and wages			$439,982.00	
Overhead Charges:				
Fuel		$10,070.00		
Factory supplies		3,648.00		
Maintenance and replacement		3,830.00		
Depreciation, machinery, tools and buildings		4,900.00	22,448.00	
Cost of producing goods sold				462,430.00
Gross profit on sales				$68,172.00
Selling Expenses:				
Advertising		$670.00		
Traveling		3,700.00	$4,370.00	
Administration Expenses:				
Office expenses		$5,300.00		
Salaries of officers		12,300.00	17,600.00	21,970.00
Gross income				$46,202.00
Other Income:				
Cash discounts on purchases				4,763.00
Total income				$50,965.00
Charges Against Income:				
Reserve for bad debts			$317.40	
Interest		$700.00		
Interest accrued on mortgage, two months.		170.00	870.00	
Discounts on accounts receivable			2,760.00	3,947.40
Net Profit				$47,017.60

FIGURE 9—NEW STATEMENT FORM OF PROFIT AND LOSS STATEMENT

"Accountancy Problems," Volume II, is shown on page 63 and on page 65 is one of the United States Steel Corporation's statements.

The purpose of this statement—which is known by various names, but officially by the title, "Profit and Loss and Income Statement"—is to tell the story of the period's business in a logical, easily understood manner. Taking up the statement on page 63, we might read along: "Last year our sales amounted to $530,602 net, and it cost us to manufacture the stuff sold just $462,430—about 87 per cent. Our manufacturing cost, you see, is the heaviest load we have to carry. Our gross profit on sales is $68,172—only about 13 per cent. It cost us $4,370 to sell our goods and $17,600 for administration expenses, leaving a gross income from sales of $46,202. To this we added a gain from discounts of $4,763 and we spent for interest charges and the like $3,947.40. Our net profit was $47,017.60." To go into a further analysis of each part of the statement is an equally easy matter, since all the information is included.

58. *Gross profit.*—The merchant and manufacturer is interested first of all in the difference between the price received for his goods and the cost price. This difference is more easily determined in the merchant's case than it is in the manufacturer's. The former's cost is determined by contract with the various dealers who supply the finished product. The manufacturer, however, buys raw material and with the aid of labor and a more or less complex manufacturing process turns it into finished goods. The manufacturer, therefore, cannot know definitely how much the finished product cost him until the accounting records supply the information. The manufacturer's cost is divided into two general divisions: prime cost composed of raw material

UNITED STATES STEEL CORPORATION AND SUBSIDIARY COMPANIES
CONDENSED GENERAL PROFIT AND LOSS ACCOUNT
For year ended December 31, 1911

GROSS RECEIPTS—Gross Sales and Earnings (see page 23)		$615,148,839.79
OPERATING CHARGES, VIZ.:		
Manufacturing and Producing Cost and Operating Expenses, including ordinary maintenance and repairs and provisional charges for depreciation	$507,973,572.86*	
Administrative, Selling and General Expenses, employes' special compensation under bonus plan and pension payments (not including general expenses of transportation companies)	16,554,152.67	
Tax (including allowance for federal excise tax)	9,622,347.23	
Commercial Discounts and Interest	3,378,133.86	
	$537,528,206.62	
Less, Amount included in above charges for provisional reserves for depreciation now deducted for purpose of showing the same in separate item of charge, as see below	19,839,098.75	
		517,689,107.87
Balance		$97,459,731.92
Sundry Net Manufacturing and Operating Gains and Losses, including idle plant expenses, Royalties received, adjustments in inventory valuations, etc	364,151.20	
Rentals received	593,499.55	
		957,650.75
Total Net Manufacturing, Producing and Operating income before deducting provisional charges for depreciation		$98,417,382.67
OTHER INCOME		
Net Profits of properties owned, but whose operations (gross revenue, cost of product, expenses, etc.) are not included in this statement	$369,297.13	
Income from sundry investments and interest on deposits, etc.	2,435,641.83	
		2,804,938.96
Total		$101,222,321.63
INTEREST CHARGES		
Interest on Bonds and Mortgages of the Subsidiary Companies	$7,921,246.81	
Interest on Purchase Money Obligations and Special Deposits or Loans of the Subsidiary Companies	116,448.38	
		8,037,695.19
Balance, being the aggregate earnings of the several companies for the year before deducting provisional charges for depreciation		$93,184,626.44
Add, Net Balance of Profits earned by subsidiary companies on sales made and service rendered account of materials which were on hand at first of year in purchasing companies' inventories, and which profits have since been realized in cash from the standpoint of a combined statement of the business of U. S. Steel Corporation and subsidiary companies		11,120,839.43
Earnings for the year 1911, per Income Account, page 33		$104,305,465.87
Less, Allowances for Depreciation		19,839,098.75
Net earnings in the year 1911		$84,466,367.12

* Includes charges for ordinary maintenance and repairs, approximately $38,000,000.

FIGURE 10

and labor; and the factory expense, burden or overhead —terms used synonymously. To supervise properly the manufacturing operations it is desirable to know what part of the cost is represented by prime cost and what

part by the more general factory expense. Hence the presentation of this part of the statement in the manner illustrated on page 63.

The difference between the total manufacturing cost and the sales is the gross profit.

59. *Selling profits.*—In order to place a finished product in the hands of a customer, certain expenses such as advertising, salaries and commissions for salesmen, traveling expenses and the like, are necessary. It is of interest to the proprietor to know what it costs him to sell his goods after they are manufactured, and what is left after deducting the selling expenses and manufacturing costs. A section called "selling expenses," therefore, is provided in the profit and loss statement. These expenses, deducted from the manufacturing profit, leave what may be termed the selling profit. In Figure 9 on page 63 this profit is not separately shown. In many cases, however, it is the practice to make this a separate calculation.

60. *Gross income.*—After the selling expenses, the next group of expenses is that including the cost of operating the administrative department. In this group are included the salaries of the executive officers and of the clerical force, miscellaneous expenses, such as postage, office supplies, car fare, and the like. These expenses are incurred in operating the entire establishment. While part would properly be chargeable to manufacturing expenses and part to the sales department, the division would be arbitrary and unscientific. Accordingly, the practice is to group them by themselves and to deduct them from the selling profit. The result is usually termed "gross income."

61. *Other incomes.*—In many establishments there are sources of income other than that for which the busi-

ness was primarily organized. Interest on investments held by the company, rents from property owned, and dividends from subsidiary concerns, are examples of such additional income, which is legitimately included as part of the profit of the business. This income, however, since it does not arise from the ordinary operations of the business, is grouped by itself in order not to confuse the comparison of the regular activities in one period with those in another. A section in the profit and loss statement called "other income" is usually provided for the purpose.

62. *Income charges.*—Likewise, there are also expenses which do not strictly arise from the ordinary operation of the enterprise. For example, interest paid on a bond issue is not really an expense of manufacturing, nor is it a selling expense, nor an administrative expense. It arises from the financial operations of the enterprise and therefore is an outside expense. Similarly discount allowed for the payment of bills before they are due is an expense incident to the financial transaction. All extraordinary expenses of this sort are also grouped together and termed "income charges." [1]

After the "other income" is added to the gross income and the "income charges" are deducted, the net profit for the period is determined.

63. *Distribution of net profits.*—The concern is now ready to provide for the distribution of its net profits. In the case of individual ownership or partnership, the profits are credited to the proprietors according to the proper proportions and by them may be withdrawn or left in the business. Under the corporate form of man-

[1]Some accountants hold that rent and taxes belong to the same class but the weight of practice is against this opinion. A more detailed discussion of these two items will be found in Chapter VI.

agement, the profits are transferred to a surplus account and afterwards paid as dividends.

It is provided by law that dividends distributed by corporations must be paid from surplus. In addition, although no court decisions yet rendered have specified any deductions from the income other than those thus far discussed in this chapter, it is generally recognized by business men that profits should not be distributed until substantial reserves have been established. It is only after setting aside reserves ample to cover shrinkage in the concern's assets and contingent losses, that the remaining net profit is distributed among the stockholders or other owners.

64. *Comparisons.*—As a means of exhibiting the real condition of a business, the profit and loss statement has considerable value since it shows in more or less detail the various sources from which earnings are derived or costs and expenses incurred. As something upon which to base policies or to analyze the numerous activities of the concern, however, this profit and loss statement in itself does not provide sufficient information. For this reason one should not rest content with examining a single statement, but should make comparisons with others covering periods of the same length. The comparison method, in fact, is of particular value when employed upon any class of reports; and in reality balance sheets and profit and loss statements are simply forms of reports.

In order to compare the various items readily, they are set in parallel columns. See figure 11.

The usual method followed in compiling these comparative profit and loss statements is to show only two periods, although at times data are shown for each month throughout the year with separate comparisons for the

several annual totals. The method itself is restricted only by the value of the information shown in relation to the cost of preparing it.

SUMMARY OF OPERATIONS OF THE AMERICAN LOCOMOTIVE COMPANY AND THE MONTREAL LOCOMOTIVE WORKS, LIMITED

FOR THE FISCAL YEAR ENDED JUNE 30, 1910, AS COMPARED WITH THE FISCAL YEAR ENDED JUNE 30, 1909

	1909–10	1908–09	Increases
Gross earnings..................	$32,203,392.10	$19,008,633.97	$13,194,758.13
Manufacturing, maintenance, and administrative expenses and depreciation....................	29,605,443.09	17,665,962.38	11,939,480.71
Net earnings....................	2,597,949.01	1,342,671.59	1,255,277.42
Interest, etc., on bonds of constituent companies, coupon notes, etc....................	513,190.69	355,532.36	157,658.33
Profit.........................	2,084,758.32	987,139.23	1,097,619.09
Dividends on preferred stock at 7 per cent.....................	1,750,000.00	1,750,000.00	
Surplus.......................	334,758.32	762,860.77*	1,097,619.09
Net credit to profit and loss......	334,758.32	762,860.77*	1,097,619.09

* Deficit.

FIGURE 11—COMPARATIVE PROFIT AND LOSS STATEMENT

65. *Condensed statements.*—A profit and loss statement may be prepared in detail or in condensed form, depending upon the nature of the enterprise. Large corporations, in order to avoid confusion, usually submit in their annual report a condensed profit and loss statement. See figure 12. This condensed statement serves as a bird's-eye view of the operations during the period, and for details concerning the various elements one may turn to the supplementary statements which accompany it.

The preceding discussion it is hoped will have made clear the purpose of the profit and loss statement, the importance of the information that it contains, and the

BETHLEHEM STEEL CORPORATION

AND SUBSIDUARY COMPANIES

CONSOLIDATED PROFIT AND LOSS ACCOUNT FOR THE YEAR ENDED DECEMBER 31, 1912

MANUFACTURING PROFITS, before providing for Depreciation or for Extinguishment of Mining Investments, etc.			$4,846,813.86
OTHER INCOME:			
Dividends and Interest on Investments, Deposits, etc.		$157,810.67	
Miscellaneous, including Rents on Properties, etc.		108,015.45	
Profit on Purchases of Bonds for Sinking Fund		1,800.00	
			267,626.12
			$5,114,439.98
DEDUCT:			
INTEREST AND OTHER CHARGES:			
Interest on Notes and Advances		$159,437.01	
Interest on Funded Debt:			
Bethlehem Steel Company:			
Purchase Money Mortgage 6% Bonds	$450,000.00		
First Extension Mortgage 5% Bonds (including proportion of discount)	528,778.75		
Six Per Cent. Gold Notes (including proportion of discount)	202,163.19		
First Lien and Refunding Mortgage 5% Bonds (including proportion of discount)	567,819.01		
Union Iron Works Dry Dock Company:			
San Francisco Dry Dock Company 5% Net Gold Bonds	25,000.00		
Union Iron Works Dry Dock Company 6% Sinking Fund Bonds	48,752.00		
Harlan & Hollingsworth Corporation:			
6% Debenture Gold Bonds (including proportion of discount)	21,965.47		
		1,844,478.42	
			2,003,915.43
			$3,110,524.55
Provision for Extinguishment of Mining Investments, Amortization of Patents, etc.		$256,305.78	
Provision for Depreciation of other Properties and Accruing Renewals		790,577.84	
			1,046,883.62
NET INCOME FOR THE YEAR			$2,063,640.93

FIGURE 12—CONDENSED PROFIT AND LOSS STATEMENT

various forms in which the statement itself is drawn up. We must now go somewhat more fully into an analysis of this statement, and examine the different accounts from which its information is drawn. For this purpose we turn to the income and expenditure accounts.

CHAPTER VI

INCOME AND EXPENDITURE ACCOUNTS

66. *Sales.*—We have seen that the profit and loss statement is made up of two comprehensive groups of accounts: the income or revenue accounts, and the cost and expense accounts. Information concerning any of these, whatever subdivisions or groupings may have been established for convenience, is found in the ledger. The operations in detail of this ledger are considered in Part II.

Of the two general groups of accounts, let us first consider that devoted to income or revenue. Since with most concerns the chief source of income is their selling activities, one account in the ledger is usually headed "sales." See figure 13. On the right hand side of this account are entered, either daily or monthly as the case may be, the sales that have been made. On the left hand side are placed the deductions and allowances for loss, damage, or returns. It is the manager's aim to keep this amount small in proportion to the opposite side, and the bookkeepers' task to set it down faithfully, whatever it may be. In any case, the difference between the two sides is the amount of net sales for the period. Should the allowances for any reason be kept in a separate account, their total must be deducted from the sales total to give us net sales, the same as though the two were kept on opposite sides of the same page.

67. *Departmental sales account.*—In order to maintain proper supervision where several different classes

of goods are sold, it is often necessary to keep separate account of the sales of each. Otherwise, although the total sales may be satisfactory, one or more of the departments may be operating at a loss. In a department store, for instance, it is desirable to know what income is derived from shoes, or sporting goods, or millinery. For the same purpose, manufacturers wish sales records kept for certain of their products, and managers of various other enterprises are constantly asking their bookkeepers for better classified sales information.

A separate set of subsidiary books for each department is sometimes the method employed in securing this information. For smaller concerns such books will probably not be necessary, the different accounts being kept in the ledger. On the proper pages, accounts will there be entered for "shoe sales," "millinery," or for whatever items specific sales information is desired. In drawing up the profit and loss statement, should the number of departments be not too numerous, it is possible to present them in such form as shown in Figure 14; otherwise it is necessary to prepare a separate statement for each department and from these compile a final condensed statement.

68. *Miscellaneous sales.*—Aside from its regular product, a concern often disposes of by-products and specially made goods. To avoid confusion, distinct accounts are established for such miscellaneous sales and they are usually recorded separately in the profit and loss statement.

69. *Income from investments.*—Interest received from bonds held by the company, and dividends from its stock investments are also beyond the routine scope of its business, hence are recorded in separate accounts. Such income differs from miscellaneous sales in that it

SALES, 19—

19							
Jan. 31	Returns and allowances............	74	00	Jan. 31	Sales for January..............	$1,000	00
Feb. 28	" "	112	00	Feb. 28	Sales for February.............	2,500	00
Mar. 31	" "	60	00	Mar. 31	Sales for March................	2,000	00
Apr. 30	" "	81	00	Apr. 30	Sales for April..................	1,800	00
May 31	" "	87	00	May 31	Sales for May..................	2,400	00
June 30	" "	70	00	June 30	Sales for June..................	2,000	00
30	Net Sales to Profit and Loss Account.	11,216	00				
		$11,700	00			$11,700	00

FIGURE 13—ILLUSTRATION OF A LEDGER ACCOUNT

PROFIT AND LOSS STATEMENT, JANUARY, 19—

	Millinery Dept.		Dry Goods Dept.		Shoe Dept.		Men's Wear Dept.		Sporting Goods Dept		Total	
Sales	$10,000	00	$20,000	00	$7,000	00	$18,000	00	$3,000	00	$58,000	00
Returns and allowances	450	00	1,200	00	102	00	900	00	245	00	2,897	00
Net sales	9,550	00	18,800	00	6,898	00	17,100	00	2,755	00	55,103	00
Cost of sales	4,000	00	9,200	00	2,700	00	8,400	00	1,200	00	25,500	00
(Details)												
Gross profit	5,550	00	9,600	00	4,198	00	8,700	00	1,555	00	29,603	00
Selling expenses	2,400	00	4,500	00	2,600	00	4,800	00	1,000	00	15,300	00
(Details)												
Trading profit	3,150	00	5,100	00	1,598	00	3,900	00	555	00	14,303	00
Administrative expenses	2,000	00	3,200	00	1,000	00	1,800	00	1,000	00	9,000	00
(Details)												
Gross income	$1,150	00	$1,900	00	$598	00	$2,100	00	—$445	00	$5,303	00
Total income											$1,700	00
Other income											7,003	00
Charges against income											840	00
Net Profit											$6,163	00

NOTE—The result of operations in the Sporting Goods Department ($445) represents a loss.

FIGURE 14—PROFIT AND LOSS STATEMENT EXHIBITING DEPARTMENTAL PROFITS OR LOSSES

is not a direct result of operations for which the business was established. For that reason it is regarded as an outside income, and as explained in a previous chapter is exhibited in the profit and loss statement under the section "other income."

70. *Discount gained.*—Two kinds of discount are very common, but since the accounting practice in the case of each differs radically, it is well to note the distinction between them. When a concern buys a stock of raw material or supplies, the actual price paid may be considerably less than the catalog price quoted. For example, in the tire business and in the hardware industry, quotations are published giving what is known as "list prices" of the various products manufactured and offered to the trade. These same prices may be maintained during an entire year, the various market changes being met not by a new and necessarily expensive issue of the catalog, but by issuing a special list of discounts from time to time. Quotations usually read "list price less 25 per cent," "list price less 30, 10 and 5,"—occasionally even four discounts being quoted. Taking the quotation "list price less 40, 10, 10 and 5," the merchant ordering goods at $100 list would owe $46.17. This difference of $53.83, however, obviously is not profit. Hence trade discounts, as these are known, are not considered in books of account, the net prices only being entered when a purchase is made.

The other class of discounts, known as cash discounts, on the other hand, are regarded as distinct sources of profit outside the regular operations of the enterprise. These cash discounts really arise out of the concern's financial operations, and are based upon the credit terms of its transactions. For example, in the case just cited the price of the $100 article may have been quoted "40,

10, 10 and 5 per cent off list, terms 2 per cent off ten days, 30 days net." The trade discounts of $53.83 have already been considered. The other part of the quotation means that the purchaser will be allowed 2 per cent deduction from the net price ($46.17) if he pays the bill within ten days; if he elects not to do so, he may pay the full $46.17 at the end of thirty days. The option, then, rests with the financial department in the purchaser's establishment; this department is confronted with the necessity of deciding whether the $46.17 may be employed in the business for twenty days at a greater profit than would be obtained if it was paid within ten days and the cash discount earned. In other words, is the use of the $46.17 for twenty days worth more to the buyer than the 92 cents he would get by paying the bill twenty days before it is due? Many concerns borrow money at 6 per cent in order to take advantage of 2 per cent discounts; obviously 2 per cent for thirty days is a much greater return than 6 per cent a year.

The profit from cash discount is not one which arises out of the sale of goods, since the decision to take advantage of such discount rests with the financial officer. In effect such profits are earned by loaning the company's capital to the concerns from which it buys goods. For this reason, the general practice is not to include these cash discount returns with the usual profits, but to place them in the "other income" section in the profit and loss statement.

71. *Miscellaneous income.*—Occasionally extraordinary profits are made through the sale of land holdings, patents which are of no further use to the enterprise, or other assets of which it may seem advisable to dispose. Such unusual profits should not be placed in the regular periodical profits because to do so would throw the nor-

mal operations out of proportion and destroy the comparison of one period's profits with that of other periods. The practice is to quote such items separately under descriptive headings and to place them in the "other income" section of profit and loss statements.

72. *Distinction between expense and disbursement.*—Business men in their dealings quite naturally come to regard every transaction from a cash standpoint. From this point of view, income is held to mean the receipt of so much cash; an expense is not an expense until the money is actually taken out of the till and paid over. But therein lurks a fallacy. A one thousand dollar coal bill may not be paid until some thirty days after the coal itself is consumed; or again, because of special rates, the coal supply may be laid in and paid for during the summer, a half year perhaps before it is used. Expenditure and disbursement do not necessarily synchronize.

Suppose that on November 1st a supply of advertising booklets, sufficient for three months' use, were purchased and paid for. There were, let us say, 60,000 booklets, approximately 20,000 for each month, the total cost of which was $1,800. Suppose also that the year closes December 1st—the financial statement being prepared as of that date. If we were to regard cash payments as expenditure, we should charge the entire $1,800 to the current year, although approximately only $600 worth of the booklets had been used. In that event this year's expenses would be stated as $1,200 more than actually was the case while next year's profits would be represented as greater by $1,200 than actually would be the case. Moreover, if the entire lot of booklets is considered as an expense and deducted from the profits of the year in which they were purchased, in strict terms it

would be necessary to consider the 40,000 left over as worthless. This, of course, is not true; for not only did they cost $1,200 but we must suppose they are worth that much to the concern; otherwise the purchase would not have been made. If accounting statements are to be depended upon at all, they must at least present the known facts; and since we know that there are $1,200 worth of booklets on hand, we must exhibit this fact in the proper place—the balance sheet. The correct procedure, therefore, would be to deduct only $600—the amount actually consumed—from the current year's profits, and regard the remainder as an asset until it also is consumed. Even though the time of payment may happen to be co-incidental with the consumption, it is not in any way related to such consumption. Indeed, it often occurs that material is bought several years before it is used.

It may be argued, in the case of the booklets, that if the business were sold, those left over at the end of the year might be of little or no value to another concern. As an answer to all such arguments, the reader must bear in mind this important rule: that *the transactions of an enterprise must be regarded as those of a going concern.* It is an unusual rather than a common thing for a business to change hands. It would be necessary to alter our entire scheme of business dealings if every establishment were regarded as a commodity which might be in the hands of one set of persons today and another tomorrow. If the credit departments of banks and mercantile houses adopt the view that their debtors are going concerns, it is surely proper that such debtors apply the same view to their own accounts.

73. *Costs and expenses.*—Granting then that an expense is one thing and a disbursement another, we next

proceed to this additional distinction: not everything consumed in a business is technically an expense. The material and labor that enter into the manufacture of a product are usually known not as expenses but as costs. So also with regard to the general outlays in a factory other than material and labor. While these are commonly known as *factory expenses* or burden or overhead, they are considered as part of the costs. The selling and administrative expenses referred to in Chapter V form the technical expenses of a business.

The distinction between costs and expenses is not very clearly defined, and frequently the two terms are used synonymously. There is no real objection to this since the expenses of a business in the long run must be met out of the sales of the product and thus may be considered part of the cost. The distinction made between the two terms is one of convenience rather than of necessity. The separation will facilitate the explanation of the various principles about to be discussed.

As a comprehensive term, including both costs and expenses, we may adopt "outgo accounts" as opposed to "income accounts," since this term is easily understood and adequately describes the two combined. Moreover it has no opponents among accountants.

74. *Material.*—Among the outgo accounts and belonging under "costs" (according to our classification), one of the most important items is that of material. This term, in its broad sense, includes raw materials required for further production and merchandise purchased in the finished state to be resold. Raw material will be found chiefly in the manufacturer's accounts, while merchandise is the commodity dealt in by the jobber, wholesaler and retailer.

Since it is desirable to calculate as accurately as pos-

sible the cost of producing each article manufactured, the manufacturer or his cost accountant finds it of convenience to distinguish materials as direct and indirect. It is known, for example, that a lot of rubber tires requires so many pounds of crude rubber, so much fabric, so many pounds of whiting, etc. In other words, the exact amount of these materials used for each lot of tires can be measured. This is direct material. Similarly, in the manufacture of a large machine it is definitely known how much steel, how many pounds of bolts and nuts, etc., are required for each machine produced.

In the making of tires other materials, such as soapstone, are used, but in such a manner that it would be difficult to determine the exact quantity required for each lot of tires. Similarly, in the making of machinery there are general materials, such as waste, which cannot be charged in definitely known quantities to any one machine or lot of machines. Such materials (frequently known as supplies) are usually called indirect materials by cost accountants. To the accurate calculation of this item they devote considerable attention.

But the distinction is of little importance in preparing a profit and loss statement. Both direct and indirect materials are generally placed together under the manufacturing section, explained in Chapter V, in fact the amount of material used in the manufacture of the product is often determined by the simple process of deducting the materials on hand from the total of those on hand at the beginning of the period plus those since purchased. If a system of cost finding is employed, the material consumed determined by this simple method, should agree with the amount shown by the more detailed cost records.

75. *Labor.*—The next item of importance, and a

fundamental factor, especially in a manufacturing concern, is labor. Here as in the case of materials distinction is made between direct and indirect. Whenever the time which a workman spends on the production of an article can be definitely determined, such time is chargeable to direct labor. Work at a machine such as a lathe or a boring mill, which is part of the direct process of manufacture, is considered direct labor, because the time so spent is readily ascertained. The work of such men as foremen, superintendents or watchmen cannot accurately be charged against any one product or group of products, and, for that reason, the wages paid them is called "indirect labor."

Direct labor is one of the basic charges, and in the profit and loss statement is placed under the "prime costs." See Figure 9. The indirect labor is considered part of the more general factory expenses.

76. *Factory expense.*—Under the term "factory expense" are included such items as the fuel required to operate a plant, the light, repairs to machinery, as well as depreciation both of machinery and factory buildings, taxes and insurance paid on these buildings although not on other real estate holdings, the indirect labor referred to in the preceding section, salaries of factory bookkeepers and managers, and the incidental expenses that occur in connection with them. All such expenses are separated from what might be termed in a general way the commercial expenses, in order that the actual cost of manufacturing a product may be determined. It is sufficient for the present to note the various outgo items included under the term factory expense and the relation of these to the other outgo elements in our enterprise, without considering the different methods of charging a portion of such general factory ex-

pense, or "overhead," against the particular article manufactured.

The three factors—material, labor and factory expense—constitute the costs in a manufacturing establishment.[1] In a commercial concern, since the production carried on is somewhat different in nature, this manufacturing cost is replaced by the cost of finished goods purchased for resale. In either case the actual costs of produced goods, when deducted from the sales, give us the first or prime profit.

77. *Selling expenses.*—The finished product is now turned over to the sales department to be disposed of. From this point on the operations of manufacturing and commercial enterprises are similar in principle and differ only in detail according to the character of the industry and the customary trade practices. Consequently it now matters little from an accounting standpoint whether the product was manufactured in our own factory or was purchased in a finished state from others, the next step in either case being to determine the cost of selling the goods so as to find how much is left over after these expenses are deducted.

The problem is merely a simple mathematical process. Under selling expenses are included such items of outgo as rent of store, salaries of sales people, advertising, traveling expenses, insurance on finished goods, warehouse charges, and the like. In a trading concern these items, when totaled, are deducted from the sales; from the prime profits, in a manufacturing establishment.

[1] Sometimes this cost is referred to as operating cost, although this term is one frequently used in railroad accounts to distinguish between operating and maintenance expenses. The latter form a very considerable part of a large railroad's outgo.

78. *Administrative expenses.*—The next group of expenses is that which has to do with the management of the entire enterprise. It is of importance to know whether the expense of supervising the establishment is in proper relation to the cost of manufacture, the expense of selling and the amount of sales. It frequently happens that a concern allows ample margins between the sales on the one hand and manufacturing and selling expenses on the other, but dissipates its profits by extravagant management expenses—exorbitant salaries of officers, luxurious suites of offices, and the like. Some division to show what these expenses are becomes necessary. Obviously, officers' salaries which are not directly chargeable to the manufacturing department or to the sales department, the traveling expenses of executives, clerks' salaries, general postage, office rent, telephone service and similar charges, make up these administrative expenses.

79. *Income charges.*—We have already discussed in Chapter V the general nature of the section known as "income charges." There is some difference of opinion among accountants as to the character of the outgo items which should be entered in this section. Some take the view that taxes should be charged against income on the ground reason that taxes are the result of the concern's financial transactions. The decision to purchase its own plant rests with the management and not with the factory heads, they say. Consistently with this view, if through lack of capital to invest in a plant, it was found necessary to rent factory premises, the rent should also be an income charge.

The opponents, however, point out that since a factory establishment cannot exist until premises are provided for it, the cost of maintaining such premises

is rightly chargeable to the factory operations. This seems to be the more widely accepted view; certainly it is the more logical.

However, discounts which are allowed to customers for the payment of their bills before these are due are the results of financial operations. In a sense, such transactions are not a part of the routine purpose of the enterprise. The concern pays for the use of the customers' capital, the converse of the condition discussed in section 70. For that reason such discounts may properly be charged against income. Interest paid on bank loans and on bonds is likewise included herein, as are also extraordinary losses which otherwise would destroy the comparison of routine income and outgo items of one period with that of others.

80. *What is net profit?*—After all these outgo items have been deducted from the sales and other income, the balance indicates the amount available for distribution among the proprietors of the enterprise. This amount usually is termed "net profit," "net income" or "surplus for the year." This last term, however, is likely to be confused with the surplus which appears in the balance sheet and which represents the accumulation of part of the net profits during several years, and is less preferable for that reason.

In a concern owned by an individual or by a partnership, the calculation of the net profits and their distribution is a matter of business policy and does not affect the public at large. In a corporation, however, the law prescribes definitely that dividends—the term applied to the payment of profits to stockholders—shall be paid out of surplus. Unfortunately the various court decisions leave ample room for doubt as to just what are such net profits or earnings. For ex-

ample, some courts have held that a corporation may distribute the current year's profits without making good previous losses of capital, such as would be occasioned by gradual depreciation in the value of assets. On the other hand, a federal court held, in the case of Main *versus* Mills, that "If there are gains and losses, the gains should be set off against the losses so far as may be necessary to keep the capital fund whole." As a fundamental business principle, it is quite clear, regardless of court decisions, that a profit cannot be said to exist until *all* the costs and expenses have been deducted. Surely, the wear and tear of a machine must be included under cost and expenses. There is no essential difference between the consumption of a dollar's worth of material and that of a dollar's worth of machine.

Yet exceptions are possible. Henry Rand Hatfield, in his valuable book "Modern Accounting," illustrates such an exception as follows:

For instance, an individual's entire income is derived from ten houses, each worth $10,000 and each yielding 10 per cent net income. If two of the houses burn down uninsured, the common sense view is that the proprietor's income is thereby cut down from $10,000 to $8,000 per annum, and that coincidentally there is a loss of capital of $20,000. It never occurs to him that he must consider his income as entirely cut off for two years until the principal can be restored. Similarly it might be an act of cruelty to dependent stockholders to stop dividends entirely until an exceptional loss is reimbursed.

Mr. Hatfield points out that a mining operation may not be considered as a going concern and that, being only of a temporary nature, there is no need for withholding part of the profits to replace worn out plant and machinery. As a general principle, however, our rule that *all* costs and expenses, including wear and tear of

assets, must be deducted from sales and other income before the true net profit is found, is the only safe one to follow.

81. *Transfer of net profits.*—Usually only part of the net profit is distributed. In such a case one of two methods of transferring the net profits is adopted. Either the amount distributed is deducted from the year's profit on the profit and loss statement and the remainder added to the surplus in the balance sheet, or the entire profit for the year is added to the surplus, and the amount distributed is deducted from the total surplus.

Occasionally the current year's profits are not sufficient for the distribution of earnings equal to that of other years. If a surplus has been accumulated, it is proper to draw upon this surplus in order to equalize the profit distribution. The usual practice is to add the profit to the surplus, deducting from the total the dividends or the amount distributed.

82. *Deficit.*—If the costs and expenses are greater than the income, the operations of the period have resulted in a deficit. It may still be possible to pay a return to the proprietors by drawing upon a surplus from previous periods. If no such surplus exists, however, the capital is said to be impaired. In other words, the loss has resulted in a reduction in the net wealth of proprietorship which may be represented as follows:

Assets...........	$9,000	Liabilities........		$5,000
Deficit...........	1,000	Capital..........		5,000
	$10,000			$10,000

Or:

Assets...........	$9,000	Liabilities........		$5,000
		Capital....	$5,000	
		Less Deficit.....	1,000	
		Present Capital.....		$4,000
	$9,000			$9,000

In passing, it may be noted that so far as accounting technique is concerned, the form illustrated in the second method is not proper in the case of a corporation. This method would indicate a reduction in the capital; but a corporation cannot reduce its capital without conforming with certain legal formalities required by the state. Few corporations are willing to admit that their capital is being reduced, and for that reason make every possible effort to prevent the necessity of showing a capital impairment on their balance sheets. Their usual method is to find one or more assets which have appreciated in value sufficient to cover the deficit. This, of course, is a subterfuge and is seldom defensible.

CHAPTER VII

OTHER ACCOUNTING STATEMENTS

83. *Accounts receivable schedule.*—The balance sheet and profit and loss statement, as we have seen, are the important documents which, if properly interpreted, will furnish to the management of an enterprise or of a department, facts and figures of great value in the further administration of the establishment. There are also various other statements, however, which throw still further light upon the various problems that arise in the conduct of a business. Some of these statements are subsidiary to the balance sheet or profit and loss statements, while others are of a purely statistical nature.

Frequently, for example, a schedule of accounts receivable is prepared. In this statement is given a list of the accounts outstanding, with the amount due from each and the time when due. The delinquent accounts are usually separated from those in good standing. The net total due us from customers, as shown in this schedule, must agree with the total shown on the asset side of the balance sheet. Hence the schedule itself is a subsidiary statement to the balance sheet; it gives a detailed analysis of the asset "accounts receivable" which usually has been listed on the balance sheet in a lump sum.

Such a schedule is useful in many ways. It gives the management an idea of who are the active customers, what amount they purchase, which customers are slow in payment, what is the percentage of delinquent

to good accounts, and the like. The schedule becomes still more valuable if it is prepared in comparative form —showing in parallel columns the same information for a number of months or whatever the accounting period.

The management obtains from such a statement a bird's-eye view, not only of the result of the credit department's work, but also of that of the sales and financial departments. Is our credit policy too severe or too liberal, are we selling to new customers or retaining the old, are we collecting the money due us with sufficient promptness, and is our proportion of slow accounts in proper relation to the prompt accounts? If definite answers to questions such as these cannot be obtained from such a statement, sufficient information is at least furnished to indicate the lines along which investigation will probably be profitable.

84. *Accounts payable schedule.*—Similarly, a schedule listing the names of concerns to whom the enterprise owes money may be prepared with advantage. Such a statement should indicate both the amount due on each account and the time when due.

As is pointed out in the treatise on "Credits," it is highly important for a business establishment to maintain a good credit reputation. To prevent being rated in Dun's or Bradstreet's as "slow pay" or receiving some other more or less unfavorable comment, it is necessary that claims be met promptly when they are due. An accounts payable schedule will at once apprise the management of any account that is being allowed to lag. It is true there may be a very good reason for the condition; but the management is then at any rate in position to find out this reason.

The schedule will also furnish a list of the firms with which a concern is dealing, and will show in a general

BONDED AND DEBENTURE DEBT OUTSTANDING, DECEMBER 31, 1911

	Total Bonds	Held by Trustees Skg. Funds	Balance Outstanding	Maturity	Interest Rate	Interest Payable
U. S. Steel Corporation 50 Yr. Gold Bonds.......	$303,957,000.00	$33,680,000.00	$270,277,000.00	April 1, 1951.	5	1-12 Monthly.
U. S. Steel Corporation 10-60 Yr. Sinbing Fund Gold Bonds..........................	200,000,000.00	10,653,500.00	189,346,500.00	April 1, 1963.	5	May & Nov.
SUBSIDIARY COMPANIES' BONDS GUARANTEED BY U. S. STEEL CORPORATION						
Union Steel Co. 1st Mtge. and Col. Trust........	43,832,000.00	9,227,000.00	34,605,000.00	Dec. 1, 1952.	5	June & Dec.
Clairton Steel Co. Bonds, viz.:						
Five per cent. Mortgage Gold.................	1,000,000.00	....	1,000,000.00	$500,000 each July 1.	5	Jan. & July.
St. Clair Steel Co. 1st Mortgage..............	1,400,000.00	....	1,400,000.00	$100,000 each Jan. 1.	5	Jan. & July.
St. Clair Furnace Co. 1st Mortgage...........	2,780,000.00	....	2,780,000.00	$100,000 each Aug. 1.	5	Feb. & Aug.
Clairton Land Co. 1st Mortgage Gold.........	1,200,000.00	....	1,200,000.00	$100,000 each Aug. 1, commencing in 1915.	4.4	Feb. & Aug.
Illinois Steel Co. Debentures of 1940............	10,000,000.00	....	10,000,000.00	April 1, 1940.	4½	Apr. & Oct.
Monongahela So. R. R. Co. 1st Mortgage........	1,200,000.00	....	1,200,000.00	Oct. 1, 1955.	5	Apr. & Oct.
Chicago, L. S. & E. Ry. Co. 1st Mortgage.......	9,000,000.00	....	9,000,000.00	June 1, 1969.	4½	June & Dec.
H. C. Frick Coke Co., Pittsburgh-Monongahela Purchase Money Mortgage...............	¶17,712,000.00	....	17,712,000.00	$600,000 each July 1, commencing in 1915.	5	Jan. & July.
SUBSIDIARY COMPANIES, BONDS NOT GUARANTEED BY U. S. STEEL CORPORATION						
MANUFACTURING COMPANIES						
Carnegie Steel Co. Bonds, viz.:	43,000.00	....	43,000.00	April 1, 2000.	5	
The Carnegie Co. Collateral Trust............	250,000.00	....	250,000.00	Dec. 1, 1912.	5	June & Dec.
Rosena Furnace Co. 1st Mortgage............	1,088,000.00	....	1,088,000.00	March 1, 1926.	5	Mar. & Sept.
Schoen Steel Wheel Co. 1st Mortgage.........						
Illinois Steel Co. Bonds, viz.:	6,900,000.00	....	6,900,000.00	April 1, 1913.	5	Apr. & Oct.
Non-Convertible Debenture.................						
	300,000.00	....	300,000.00	$100,000 each Sept. 1.	6	Mar. & Sept.
THE LORAIN STEEL CO. BONDS, VIZ.:						
The Johnson Co. 1st Mortgage...............						
U. S. Steel Products Co. Bonds, viz.:	600,000.00	....	600,000.00	July 2, 1917.	5	Jan. & July.
Risdon Iron & Loco. Works, 1st Mtge.........						
Am. Sheet & Tin Plate Co. Bonds, viz.:						
W. Dewees Wood Co. 1st Mortgage...........	2,000,000.00	....	2,000,000.00	$100,000 each May 1, 1915 to 1929. $500,000 May 1, 1930.	5	Mɪy & Nov.

¶ $1,212,000 of this total not yet delivered.

FIGURE 15—ANALYSIS OF BONDED DEBT.

BONDED AND DEBENTURE DEBT OUTSTANDING, DECEMBER 31, 1911—CONTINUED

	Total Bonds	Held by Trustees Skg. Funds	Balance Outstanding	Maturity	Interest Rate	Interest Payable
Tennessee Coal, Iron & R. R. Co. Bonds, viz.:						
Consolidated Mtge. (Tenn. Div.)	$1,374,000.00	$267,000.00	$1,107,000.00	Jan. 1, 1917.	6	Apr. & Oct.
Purchase Money and Impt. Mtge. (Birmingham Div.)	4,175,000.00	178,000.00	3,997,000.00	Jan. 1, 1917.	6	Jan. & July.
General Mortgage	7,089,000.00	....	7,089,000.00	July 1, 1951.	5	Jan. & July.
Cahaba Coal Mining Co. 1st Mtge	892,000.00	....	892,000.00	Dec. 1, 1922.	6	June & Dec.
Alabama Steel and Shipbuilding Co. 1st Mtge.	730,000.00	....	730,000.00	Jan. 1, 1930.	6	Jan. & July.
Potter Ore Co. 1st Mtge. Bonds (half of issue), the bonds being guaranteed jointly by T. C., I. & R. R. Co. and Republic Iron & Steel Co.	314,500.00	....	314,500.00	Dec. 1, 1931.	5	June & Dec.
COAL AND COKE COMPANIES						
H. C. Frick Coke Co. Bonds, viz.:						
First Mortgage	700,000.00	....	700,000.00	$100,000 each July 1.	5	Jan. & July.
Continental Coke Co. Pur. Money Mtge.	296,000.00	....	296,000.00	$37,000 each Apr. 27.	4½	Annually.
Host.-Conn. Coke Co. 1st Mortgage	696,000.00	....	696,000.00	July 1, 1942.	5	Feb. & Aug.
Sharon Coke Co. 1st Mortgage	422,000.00	....	422,000.00	Dec. 2, 1931.	5	June & Dec.
Little Vermilion Coal Co. 1st Mortgage	96,000.00	....	96,000.00	July 1, 1920.	5	Jan. & July.
TRANSPORTATION COMPANIES						
Union Railroad Co. Bonds, viz.:						
First Mortgage	2,000,000.00	....	2,000,000.00	Sept. 1, 1946.	5	Mar. & Sept.
Duquesne Equipment Trust	1,150,000.00	....	1,150,000.00	$100,000 each Mar. 1, commencing in 1914.	5	Mar. & Sept.
Mifflin Equipment Trust	1,200,000.00	....	1,200,000.00	$120,000 each Aug. 1, commencing in 1921.	5	Feb. & Aug.
*P., B. & L. E. R. R. Co. Bonds, viz.:						
First Mortgage Consolidated	6,409,000.00	....	6,409,000.00	Jan. 1, 1947.	5	Jan. & July.
Debenture Gold	2,000,000.00	....	2,000,000.00	June 1, 1919	5	June & Dec.
Pitts., Shenango & L. E. R. R. Co. Bonds, viz.:						
First Mortgage	2,994,000.00	....	2,994,000.00	Oct. 1, 1940.	5	Apr. & Oct.
First Mortgage Consolidated	597,000.00	....	597,000.00	July 1, 1943.	5	Jan. & July.
Shenango Equipment Trust	146,000.00	....	146,000.00	$73,000 each Apr. 1.	5	Apr. & Oct.
Greenville Equipment Trust	900,000.00	....	900,000.00	$100,000 each May 1.	5	May & Nov.
Butler Equipment Trust	2,050,000.00	....	2,050,000.00	Apr. 1, 1921.	5	Apr. & Oct.

*Authorized but not created.

FIGURE 15 (Continued)—ANALYSIS OF BONDED DEBT.

BONDED AND DEBENTURE DEBT OUTSTANDING, DECEMBER 31, 1911—CONTINUED

	Total Bonds	Held by Trustees Skg. Funds	Balance Outstanding	Maturity	Interest Rate	Interest Payable
Bess. & L. E. R. R. Co. Bonds, viz.:						
Erie Equipment Trust	$1,220,000.00	....	$1,220,000.00	March 1, 1922.	5	Mar. & Sept.
Locomotive Equipment Trust	150,000.00	....	150,000.00	March 1, 1913.	5	Mar. & Sept.
Standard Equipment Trust	1,060,000.00	....	1,060,000.00	April 1, 1925.	5	Apr. & Oct.
Bessemer Equipment Trust	1,100,000.00	....	1,100,000.00	$110,000 each Mar. 1, commencing in 1918.	5	Mar. & Sept.
Conneaut Equipment Trust	300,000.00	....	300,000.00	April 1, 1919.	5	Apr. & Oct.
National Equipment Trust	160,000.00	....	160,000.00	$40,000 each May 1.	5	May & Nov.
Meadville Equipment Trust	550,000.00	....	550,000.00	$55,000 each Mar. 1. commencing in 1921.	5	Mar. & Sept.
Elgin, Joliet & Eastern Ry. Co. 1st Mtge	10,000,000.00	....	10,000,000.00	May 1, 1941.	5	May & Nov.
Duluth & Iron R. R. R. Co. Bonds, viz.:						
First Mortgage	8,151,000.00	....	8,151,000.00	Oct. 1, 1937.	5	Apr. & Oct.
Second Mortgage	1,000,000.00	....	1,000,000.00	Jan. 1, 1916.	6	Jan. & July.
D., M. & N. Ry. Co. Bonds, viz.:						
First Division 1st Mortgage	1,174,000.00	....	1,174,000.00	Jan. 1, 1922.	6	Jan. & July.
Consolidated 1st Mortgage	2,326,000.00	$1,561,000.00	765,000.00	Jan. 1, 1923.	6	Jan. & July.
General Mortgage	11,761,000.00	730,000.00	11,031,000.00	Jan. 1, 1941.	5	Jan. & July.
Pittsburgh Steamship Co. Bonds, viz.:						
First Mortgage	750,000.00	....	750,000.00	$188,000 each Jan. 1.	5	Jan. & July.
American S. S. Co. 1st Mortgage	5,630,000.00	2,449,000.00	3,181,000.00	Nov. 1, 1920.	5	May & Nov.
St. Clair Terminal R. R. Co. 1st Mortgage	750,000.00	....	750,000.00	Feb. 1, 1932.	5	Feb. & Aug.
Connellsville & Monon. Ry. Co. 1st Mtge	1,007,000.00	163,000.00	844,000.00	Sept. 1, 1930.	4	Mar. & Sept.
Sundry Matured Bonds unpresented for payment.	16,000.00		16,000.00			
Total	....	....	$627,689,000.00			
*Less proportion of bonds outstanding account minority interest in stock of P., B. & L. E. R. R. Co. not owned	....	....	7,219,058.16			
Total Bonds	....	....	$620,469,941.84			
Illinois Steel Co. Debenture Scrip (payable April 1, 1913)	....	....	31,434.99			
Grand Total Outstanding	....	$58,908,500.00	$620,501,376.83			

TREASURY BONDS SUBJECT TO SALE		Maturity	Rate	Payable
Illinois Steel Co. Debenture Gold Bonds of 1940	$614,000.00	April 1, 1940.	4½	April & Oct.
Youghgahela Water Co. First Mortgage	350,000.00	$25,000 each June 1.	5	June & Dec.
Union Steel Co. First Mortgage & Collateral Trust	362,000.00	Dec. 1, 1952.	5	June & Dec.
	$1,326,000.00			

*Authorized but not created.

FIGURE 15 (Concluded)—ANALAYSIS OF BONDED DEBT.

way the amount of business being done with each creditor. Possibly, too, there may be an account or more which should not appear on the list. Not long since, a purchasing agent who had acquired the unfortunate habit of ordering on the company's order blank articles for his personal use, was betrayed through a statement of precisely this nature. There were found suspicious accounts with several department stores, and when these were investigated the purchasing agent's thievery was immediately unearthed.

85. *Sales and other income analysis.*—After all, the sales department is the balance of power in a business establishment. Not until a product is actually sold can there be any profits. Accordingly, a study of successful business houses will generally reveal the fact that their success was chiefly due to careful study of markets, planning of sales campaigns, training of salesmen, building of sales arguments and effective advertising. However meritorious the article, to sell it to an unwilling public requires more than ordinary skill, and above all a knowledge of the factors involved.

The accounts should serve in this important work by presenting valuable information to the sales directors. Analyses of sales according to periods of time, to territories, branch offices, salesmen, classes of goods, lines of industry, and the like, should be prepared and kept up to date. Much of this information is of a statistical nature and cannot be recorded in the books of accounts. An analysis of the orders themselves is made in most cases.

Similar analyses of other income items are useful. The management must be in a position to detect almost immediately any decrease in income in order to correct a possible faulty condition; also any increase in order to take full advantage of possible favorable circumstances

that have arisen. The great European war caught napping many concerns with inadequate accounting information. They were not in a position through previous analysis of their incomes to calculate the effect of the war upon their individual business activities.

86. *Expense schedules.*—In almost every business there are certain expense accounts which, if properly examined, will afford much more information than might appear on the surface. We might, for example, find in the profit and loss statement such a general item as "miscellaneous expense." Usually this is a very tempting hiding place for improper outlays. A statement setting forth the various kinds of expenses which make up the total of the item may reveal leaks which should immediately be stopped.

Occasionally, it is wise to prepare analytical statements covering such items as salaries, stationery and printing, postage, and the like. No definite procedure can be recommended, for the nature of subsidiary statements of this kind depends altogether upon the kind of business that is being transacted. What may be an account particularly rich in information in one establishment, may be of little value in another.

87. *Departmental analyses.*—In a concern where there are a number of departments, it is usually well to analyze the operation of each, comparing its expenses with those of other years and with those of other departments. This comparison is of value not only in comparing the efficiency of the departmental managers, but also in controlling the sales and expenses. Especially is this true of branch offices. A case of pay-roll padding in the Chicago office of a New York concern was uncovered in just this manner. The salaries paid to the Chicago salesmen increased slightly from month to

month until the item had grown to what seemed undue proportions. The general manager at the head office, by comparing the salesmen's salaries with the amount of business done and the number of salesmen employed, became suspicious, and upon investigation found his suspicions well founded. In another case, the postage used in an advertising department seemed unduly large compared with the other expenditures in the department; an investigation proved that a large part of the postage stamps were sold to unscrupulous persons who made a practice of buying stamps from weak-willed office boys. Although the detection of moral delinquency is by no means the chief service of such analyses, their efficacy in this respect indicates their value in general.

88. *Comparative statements.*—A report—and these accounting statements are in reality reports prepared in technical form—is most valuable when it is compared with other reports conveying similar information applied to periods of the same length. The amount of detail and the number of periods supplied for comparison will vary with the nature and size of the concern. Plainly, the more we rely upon carefully prepared facts and figures, and the less we rely upon memory and personal observation, the more accurate and effective will be the resulting supervision and administration.

Such reports should be issued promptly, for, as Harrington Emerson remarked in an article in the *Review of Reviews,* "a report is much like an egg; it is useful when it is fresh." A report issued several months after the events it covers may be too old to be effective in correcting existing evils; the persons affected may be unable to account for shortcomings which are not fresh in their minds. Moreover, the concern may actually con-

UNITED STATES STEEL CORPORATION AND SUBSIDIARY COMPANIES

EARNINGS BY MONTHS AND QUARTERS FROM JANUARY 1, 1907, TO DECEMBER 31, 1911

Month	1907	1908	1909	1910	1911
January	$12,838,703.25	$5,052,743.24	$7,262,605.62	$11,316,013.95	$5,869,416.35
February	12,145,814.95	5,709,427.64	7,669,335.70	11,616,861.41	7,180,928.04
March	14,137,973.85	7,466,834.23	7,989,327.43	14,684,001.20	10,468,858.90
First Quarter	39,122,492.05	18,229,005.11	22,921,268.75	37,616,876.56	23,519,203.29
April	14,600,837.97	6,761,680.59	8,163,244.48	13,414,956.00	9,412,572.79
May	16,056,832.06	6,021,278.73	9,661,227.76	13,229,289.14	9,590,443.99
June	14,846,034.82	7,482,796.54	11,516,019.38	13,526,715.69	9,105,503.45
Second Quarter	45,503,704.85	20,265,755.86	29,340,491.62	40,170,960.83	28,108,520.23
July	13,804,167.34	8,599,630.15	12 530,769.84	12,132,188.06	8,750,467.08
August	15,279,172.67	9,152,311.13	12,437,754.28	13,132,755.35	10,710,144.66
September	14,720,945.15	9,354,333.42	13,278,383.31	12,100,243.84	10,062,112.84
Third Quarter	43,804,285.16	27,106,274.70	38,246,907.43	37,365,187.25	29,522,724.58
October	17,052,210.70	9,415,667.63	14,048,205.13	10,512,130.67	9,159,338.87
November	10,467,252.60	8,756,728.90	13,711,764.67	8,228,857.08	6,946,716.82
December	5,014,728.36	8,074,278.37	13,222,776.34	7,160,742.12	7,048,962.08
Fourth Quarter	32,534,191.66	26,246,674.90	40,982,746.14	25,901,729.87	23,155,017.77
Total for Year	$160,964,673.72	$91,847,710.57	$131,491,413.94	$141,054,754.51	$104,305,465.87

FIGURE 16—ANALYSIS OF EARNINGS

tinue to lose money during the time during which the reports are being prepared.

89. *Charts.*—It is possible to present the information revealed by analyses of accounts in even more graphic form than through statements or tables of data. Considerable use is at present being made of such graphic charts, as they are termed, an example of which is given in Figure 17. The "curves"—the lines which show the variations in the income or expense items—will immediately direct attention to any undue changes. The chart on page 99, for instance, tells an interesting story. In the first place it is evident the peak loads—the heaviest volume of business—are in April and November. In the second place the expenses do not fluctuate as violently as do the sales nor are the expenses always in direct relation to the sales. Thus, in April the sales were about $27,800 resulting in a profit of $7,800, while in November, with sales of $28,000, the profit was only about $6,800. This is a condition which should be investigated.

The business man not especially trained in accounting can more readily visualize such conditions when they are brought to him in a chart of this kind than he can by examining a quantity of figures. Indeed, it would not be surprising if in the future an increasing number of accounting statements were presented in the form of graphic charts.

90. *Summary.*—Thus far we have discussed those features of a system of accounts that are of chief value to business men, viz.: the accounting statements. In briefest outlines these statements are now summarized in graphic form in Figure 18. If the reader has understood the value of these different statements and if he appreciates their various uses in practical business oper-

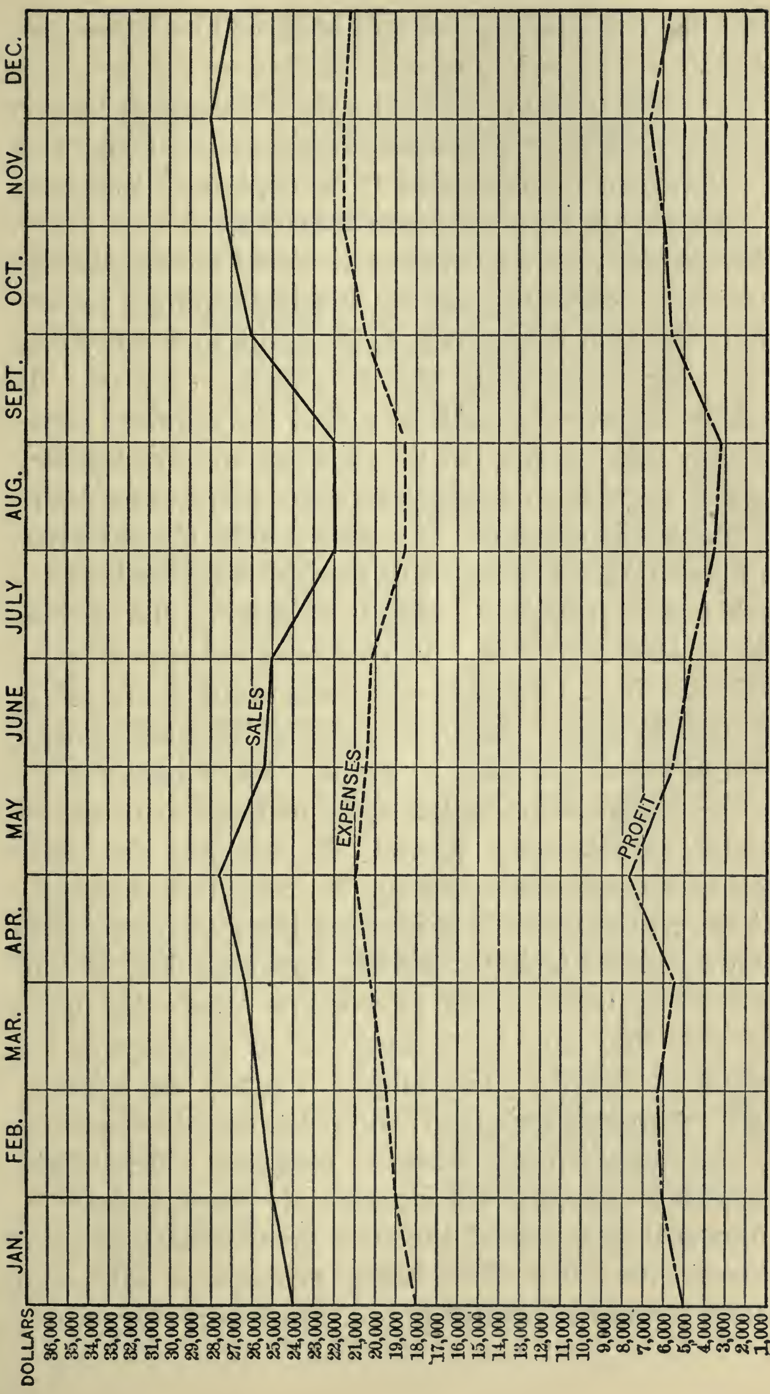

FIGURE 17. GRAPHIC CHART ILLUSTRATED

ations, the chief purpose of this book will have been accomplished; for not only will he then put such statements to the uses for which they are intended, but he will be in position to understand more easily the reasons for the various methods now to be explained, that have been adopted in keeping books of account.

The reader may ask whether it would not be possible to prepare such statements by merely keeping a memorandum of each transaction as it occurs and compiling from these memoranda the information desired. It would no doubt be *possible* to gather the required information in this manner, but the time and labor and money required in doing so would practically prohibit the keeping of any sort of record. In other words, the chief reason for adopting systematic methods of keeping books—which means primarily methods of finding the various kinds of information in which the business man is interested—lies in the desire to eliminate unnecessary labor, time and expense. In an ordinary-sized establishment it would require months to prepare the statements we have been discussing, unless some methodical means of keeping records were in use. To examine the thousands of memoranda depicting the various transactions that take place even in a medium-sized concern would be an enormous task and utterly impracticable. It will therefore be worth while to examine briefly the basic principles that have been employed in simplifying the keeping of records. The subject is much less intricate than is commonly supposed; and if the essential features are understood, many business practices which might otherwise be obscure will immediately become clear.

Accounting is one of the four great departments of business—the other three being production, sales and financing—and is intimately concerned with every phase

of a business enterprise, the smallest expenditure being recorded with as much care as the largest. For that reason, there is probably no better method of acquiring a grasp of the details of any given business than to examine its books of account and its statements. The executive able to draw from these sources with readiness and accuracy is also in position to be master of his business.

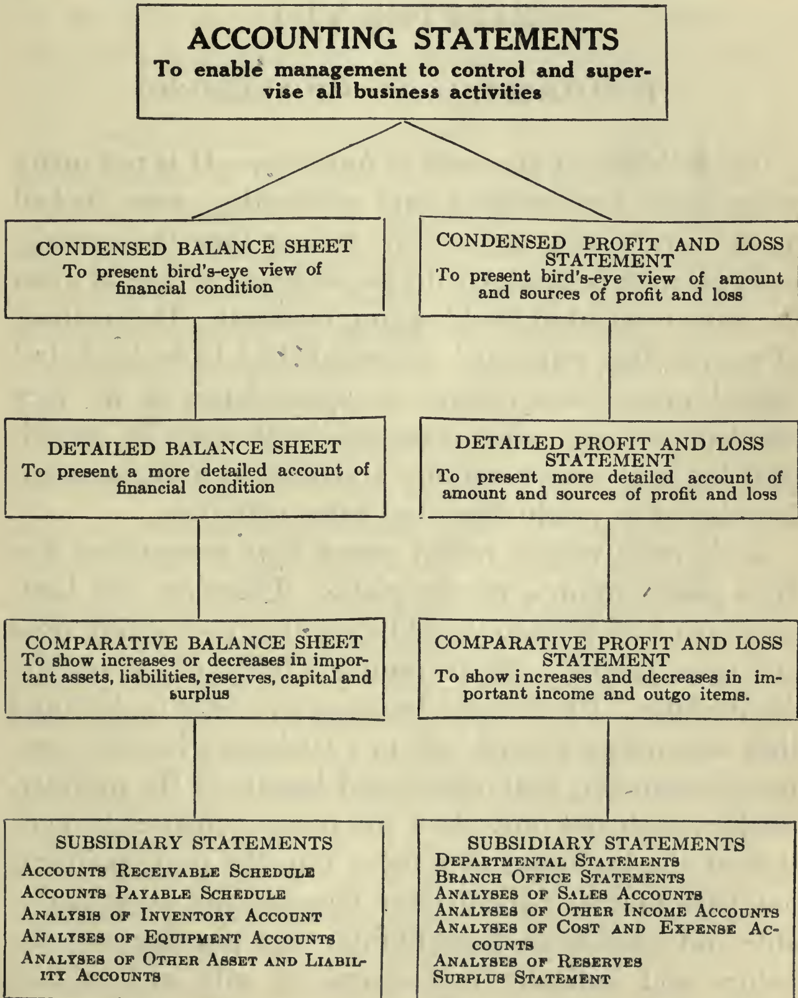

Figure 18—Chart Showing Relation and Uses of Various Accounting Statements

PART II: MACHINERY OF BOOKKEEPING

CHAPTER VIII

FUNDAMENTALS OF BOOKKEEPING

91. *Relation of accounts to business.*—It is not many years since bookkeeping and accounting were looked upon as necessary evils. For a long time the average business man begrudged the expenditure of funds upon the improvement of bookkeeping methods. He realized, of course, that some sort of records had to be kept, but looked upon these records as appendages of no very great importance when compared with what he considered the real money-making activities in a business enterprise—the production and sales activities.

It is only within recent years that accounting has been placed upon a proper plane. There are still business men who hold to the old view that accounting does not earn profits. Their number, however, is rapidly diminishing. Progressive business men now understand that accounting records are to a business what the compass, barometer, lead, charts and log are to the mariner. Such records not only show the present financial condition of the business; they delve into the past, pointing out with unerring hand what transactions were profitable and what were unprofitable; they also forecast the future and indicate their course of safe and certain progress.

The average business concern may conveniently be divided into four branches of activity—those of production, selling, financing and accounting. Until recently, only three branches were recognized, the accounting activities being subordinated to the financial officer. We shall see, as we proceed, that the accounting records are impartial accounts of all the transactions that take place in the course of operating a business, whether such transactions involve the exchange of one cent or of one million dollars, and that they exhibit, without prejudice, the results of these transactions. Being, therefore, the final guides in the direction of a business enterprise, these records should be free from undue influence of either the producing, the selling or the financing factors. The person in control of the accounts should report his findings direct to the general management.

Since the accounting records are so closely related to the detailed activities of the various departments, the heads of these departments are necessarily interested in what the accounts reveal. Advertising managers, sales managers, production managers, credit men and other department heads, although highly trained specialists, find it necessary to understand the principles of accounting so that they may properly interpret the records of their own departments. This new interest in the subject of accounting is in harmony with the prevailing tendency to supplement specialized knowledge with an understanding of the broader principles that underlie business as a whole.

92. *Definition of bookkeeping.*—In its broader sense, the term bookkeeping is applied to any system of records which set forth the history of the events that take place in the course of business. This was probably the definition given it by merchants in the days when the

first, crude records made their appearance. Since "bookkeeping" plainly meant the keeping of books, it was made to include memorandum books of every kind.

Later, the term "bookkeeping" became confined to the art of recording exchanges of the pecuniary rights and obligations of a firm, in such a way as to exhibit the exact facts and their results in a complete, systematic and convenient form, and so as to prove the accuracy of the records. It will be seen that bookkeeping is here recognized as an art, that it is confined to the recording of transactions of a pecuniary nature, that it includes not only actual exchanges, but transactions that involve future exchanges, and that some restrictions are placed upon the method of recording these transactions—that is, they must be capable of interpretation in complete, systematic and convenient statements of results—and that it provides for a method of proving the accuracy of the records.

It is important to keep these factors in mind, not only when studying a treatise on bookkeeping and accounting, but also when actually handling, supervising or interpreting a set of accounts.

93. *Explicit records.*—Bookkeeping records, to serve their purpose, should be so explicit and minute that at any later time the nature and character of the exchange may be readily understood, without oral explanation, even if such were available. There is an unwarranted tendency to slight the explanatory part of an accounting entry for the sake of brevity. It should be established at the outset as an inflexible rule that the details of every transaction must be fully recorded. Innumerable losses have occurred through law suits and from defalcations due to the practice of recording only what *seemed* to be the essentials of a transaction. It should

be remembered that what today appears inconsequential, may a year hence be of vital importance.

Memory should play absolutely no part in the keeping of books. Bookkeeping is a business activity from which the human factor should be eliminated so far as possible. Records of transactions should be made immediately and should be in such detail that anyone by reading the bookkeeping entry can understand clearly what has taken place.

94. *Correct classification.*—It is not, however, enough that all transactions be recorded in complete detail. The records should also be arranged in convenient classifications so that the total results of the exchanges that take place can be readily separated into intelligible groups. It must be remembered that the bookkeeping records should be capable of guiding the management in directing the business. Without such regard to their final purpose, they are valuable only as proof of what has taken place in each particular instance—after all the least important of their functions. Such records should reflect in unmistakable terms just how each branch of a business enterprise has contributed to the profits or losses, so that the person in charge may further develop the profit-making factors and eliminate the unprofitable ones. The details of such proper classification will be explained later.

95. *Time saving.*—The system of account-keeping should be so designed that the maximum amount of information may be obtained at a minimum of clerical labor.

Exchanges or business transactions differ in character, and may be classified as follows:

1. An exchange of merchandise for cash.
2. An exchange of merchandise for debts.

3. An exchange of services for cash.
4. An exchange of services for merchandise.
5. An exchange of services for debts.

These may, of course, be reversed: an exchange of cash for merchandise, etc.

It must also be remembered that many exchanges are of a compound nature, involving the exchange of two or more items for a single one. Thus, merchandise and services may be exchanged for cash, or merchandise may be exchanged for cash and debts. Taken together, these exchanges embrace all the facts with which bookkeeping concerns itself.

As a business becomes more complex, the labor necessary to record all the transactions becomes an increasingly important factor. Even more important may be the time factor, unless modern methods of bookkeeping and accounting have been adopted. Right here, many business men make the mistake of curtailing expense in the bookkeeping or accounting departments, forgetting that while the initial cost of this or that book or device may appear high, the resultant saving in time and labor may within a short period equal in value fifty to one hundred times the original cost.

It may be well to refer here to a common practice that should be discontinued. Business men and bookkeepers often procure from a stationer a ready-made set of books bearing the titles of books of account, and attempt to fashion their records after these books, which have been prepared by men who know absolutely nothing of the particular character of the business for which they are to be used. A little reflection should convince anyone that the books should be planned to suit the business, not the business to suit the books. Blank books are easily obtained, and for smaller concerns the column headings

may be written in by hand. Larger enterprises can afford to have their books made to order. Even a medium sized establishment will, in most cases, profit by using a set of books especially adapted to its needs.

96. *Double-entry bookkeeping.*—There are two systems of bookkeeping, known respectively as double-entry and single-entry. The double-entry method is now in almost universal use. Instances where single-entry bookkeeping is employed are becoming very rare.

Double-entry bookkeeping involves first of all a collection of accounts. Before going farther, it may be well to establish definitely the meaning of the word "accounts" as here used. Professor Charles E. Sprague, in his book "The Philosophy of Accounts," defines the term as "a systematic statement of financial facts of the same or opposite tendency leading to a conclusion." Selecting, for the sake of example, an account entitled "cash" and applying Professor Sprague's definition, we reach the conclusion that the cash account gives us an orderly record of the receipts on one hand and of the expenditures on the other (these being facts of the same or opposite tendency) and that it leads us to a conclusion which, in this case, is the amount of cash on hand. The account might be arranged in chronological order, as shown in the following example:

Cash

On January 2d, received from John Smith, in payment of bill dated December 1st	$100.00
January 2d, paid to Abraham Cox for oats bought in December	30.00
January 3d, received from Joel Brown on account	50.00
January 10th—the balance on hand is	120.00

This would be an account, though not a systematic account. From a historical point of view, it would be a

satisfactory record of events in the order in which they occurred, but it would be of little use in every day business transactions.

If, however, these facts are rearranged and presented in the following form, we shall have an *account* as the term is now understood.

January 2d, received from John Smith in payment of bill dated December 1st	$100.00	January 2d, paid to Abraham Cox for oats bought in December	$30.00
January 3d, received from Joel Brown on account	50.00	January 10th — balance on hand.....	120.00
	$150.00		$150.00

Every system of bookkeeping deals with a collection of such accounts in many different forms, but under the double-entry system it is necessary that every time an entry is made on one side of an account, an opposing entry must be made on the other side of some other account.

97. *Debits and credits.*—The purpose of making two opposing entries for every transaction will be seen as we proceed. For the present, in order to avoid confusion, it is enough to remember that in double-entry bookkeeping there must be a debit for every credit and a credit for every debit. The word "debit" is derived from the Latin *debere,* to owe, and the word "credit" is derived from the Latin *credere,* to trust. When an account is debited, or charged, an entry is made on the left-hand side. The receipts recorded in the cash account just illustrated are debits. When an account is

credited, the entries are always made on the right-hand side.

Under the double-entry system of bookkeeping, the total of all debits appearing upon the account should equal the total of all credits. A double-entry set of books may be compared to a pair of scales. If for every silver dollar placed on the left-hand scale, we place another on the right, the scales will constantly be in balance. Similarly a set of properly kept double-entry books is at all times in balance.

One purpose of the double-entry system is, therefore, to insure accuracy, and frequent tests are made by balancing the total of the debits against the total of the credits. Should these not agree it is at once evident that one or more errors have been made.

98. *Rules for debiting and crediting.*—It is important to know definitely just when an entry should be placed on the debit side and when on the credit side of the account. Every business transaction results in changes in what is owned (assets) or what is owed (liabilities). If a merchant has sold fifteen pounds of sugar for a dollar, he owns more dollars, but less sugar. If he sells the sugar on credit, he owns instead of the sugar, not more dollars, but the right to demand from the purchaser a dollar at some future time. Similarly, if he buys a bag of oats for his horse, he may transfer a dollar into oats, thus changing the thing he owns, or he may add the oats to his possessions and owe the dollar for, say, a month, thus, increasing at the same time both his assets and his liabilities. When the time comes to pay for the oats, the merchant will decrease what he owns (cash), and at the same time decrease what he owes (his debt to the man from whom the oats were purchased).

Every increase in assets is represented by a *debit* to

the account receiving the benefit of the increase; every decrease in assets is represented by a *credit* to the account suffering by the reduction. Similarly, every increase in liabilities is represented by a *credit*, and every decrease in liabilities by a *debit*. To record the foregoing transactions would require the following entries:

1. Debit cash, $1; credit sugar, $1.
2. Debit purchaser, $1; credit sugar, $1.
3. Debit oats, $1; credit cash, $1.
4. Debit oats, $1; credit seller, $1.
5. Debit seller, $1; credit cash, $1.

It is not to be presumed, however, that the merchant sold his sugar for exactly what it cost him. He may have found that fifteen pounds of sugar had a value to him of $.80. He had considered the sugar at that price, among the things he owned. In that case, the sale is not an even exchange. The merchant is $.20 richer. In addition to the exchange of $.80 worth of sugar for $.80 in cash, $.20 is received, which represents an increase in the net wealth of the merchant. Our entry then should read: Debit cash, $1.; credit sugar, $.80; credit merchant, $.20.

So, also the oats which were purchased, while representing for the moment an even exchange of money for oats, will in the long run decrease the merchant's net wealth because the oats will be consumed. Here we have a crude illustration of the manner in which an expense is originated and its final effect upon the financial status of a business. A further entry will eventually be necessary. This entry may be expressed as follows: Debit merchant, $1; credit oats, $1.

From this illustration may be deduced the following

rule: every *debit* entry represents one of the following three possible occurrences—an increase of assets, a decrease in liabilities or a decrease in net wealth. Every *credit* entry, on the other hand, represents one of these three possible occurrences—a decrease in assets, an increase in liabilities or an increase of net wealth. By net wealth or proprietorship is meant the difference between things owned and things owed, if the former is the greater. If a merchant owes more than he owns, the difference is a "deficit."

We have already seen that every transaction involves at least two of the occurrences just mentioned. Since these two are opposed to each other, they are represented by a debit on one hand and a credit on the other. Double entry bookkeeping, therefore, is primarily concerned with the recording of these two opposite transactions, and was evolved to reflect the result in both directions. Many consider the primary object of the system to be the showing of a debit for every credit for the sake of detecting errors. This, however, though a convenient result, is merely a secondary object.

99. *Single entry bookkeeping.*—In a single entry system of accounts, only one entry is made for each transaction. Single entry is a relic of the methods used in Athens and Rome many centuries ago. The system has only one purpose—that of showing by memorandum the transaction between the merchant and his customers on the one hand, and between the merchant and his creditors on the other. If goods are sold on credit, the customer is charged, but no opposing entry is made. When the customer pays, his account is credited without an opposing entry being made, although the bank book, if properly kept, serves as a cash account. Similarly, when goods are purchased on credit, only the seller's ac-

count is credited. When the bill is paid, the account is charged or debited.

Occasionally, statistical accounts are kept for the purpose of giving specialized, detailed information. These accounts, however, have little or no relation to a definite system of bookkeeping and they afford no automatic means of detecting errors.

In single entry there is only one method of determining what profits or losses have been made during a period. If a record of things owned and owed at the beginning of the period is available, so that the net wealth or proprietorship at that time can be determined, a count at the present time of the things owed and owned must be made. The difference between the proprietorship at the beginning and at the end of the period, taking into account any withdrawals in the meantime, will tell us the profits or loss during the period, but the very important information as to how these profits or losses came about is absent.

100. *Nominal or economic accounts.*—The accounts included in a double-entry set of books are usually separated into two broad divisions, known as personal and impersonal accounts. Personal accounts, as the name implies, refer to those dealing with persons; while impersonal accounts have to do with tangible and intangible property. Impersonal accounts are further separated into real or specific and nominal or economic. Real or specific accounts are those dealing with assets and liabilities; nominal or economic accounts exhibit the results of the transactions that have taken place.

The profit made by the merchant in the hypothetical case already referred to would be credited to a nominal account showing a gain of a certain kind—in this case, profit on sale of sugar. The oats which were consumed

would be debited to a nominal account probably headed "stable expense" and representing a loss or outgo. It is enough for the present to remember that real accounts include assets and liabilities and indicate the financial standing of the concern, while economic accounts show how profits have been made or losses sustained.

CHAPTER IX

BOOKS OF ORIGINAL ENTRY

101. *Significance of term.*—In bookkeeping and in accounting, memory as we have said, plays little or no part. The human mind is a sensitive organ and readily receives impressions that are not always accurately reflected. It is easy, for example, a week after a transaction has taken place, to believe that the price was $50.00 instead of $15.00.

For that reason, the courts will not accept as important evidence anything but the "book of original entry." The book in which the transaction was written immediately after it took place is referred to by this term. Copies made from that original record are not accepted. While this original entry is not the only evidence examined in a case depending upon the records of the transactions under review, it will, in the absence of a written agreement signed by both parties, be accepted as proof of the transaction, unless the opponent can disprove it by evidence equally or more authentic.

102. *What may be a book of original entry.*—The word "book" as used in the term "book of original entry" has a very broad meaning. In the decision handed down in one case, the court stated that "a notched stick, pieces of board sawed out of a corn crib, and boards upon which the measurements of lumber were kept, have all been held good books of original entry, and receivable in evidence."

In another case, the courts emphasized the impor-

tance of immediate record by refusing to admit as evidence a small pass book upon which entries had not been made in chronological order. A part of the decision rendered is interesting enough to quote:

> Where accounts offered in evidence as books of original entry had been started in a small pass-book and continued on sheets of paper attached together and were objected to on the ground that the entries made on the sheet were not made at the time of their respective dates, the dates not all being in chronological order, and the ink having the appearance of being fresh, indicating that the entries were made simultaneously, it was held that the account was admissible for whatever it was worth, going to the jury subject to criticism and cross-examination.

While the phrasing of this citation does not indicate specifically that evidence of this kind is not admissible, the inference drawn is that a book in which transactions are not recorded chronologically is open to question. Unless it were proved that the book is actually a book of original entry, it would not be regarded as good evidence.

Two things, therefore, should be remembered: first, that transactions should be recorded immediately after they take place, and second, that, while the records need not be placed in a bound book, they should be kept in such a manner that their authenticity can not be questioned. For this reason, consecutively numbered charge lists have definitely been held as books of original entry, admissible in the courts as good evidence.

103. *Day-book.*—In double entry bookkeeping there are really only two books in which financial transactions are recorded—the journal and the ledger. All other books, not of a statistical nature, are sub-divisions of these two books. The journal and its subsidiary books are the chronological records of transactions and are

used as basis for the charges and credits in the ledger accounts. The ledger is, in reality, a summary of all the transactions that have taken place, indicating how these transactions have affected the assets and liabilities on the one hand, and the profits and losses on the other.

There were formerly three basic books, the day-book being the third. The day-book was nothing more than a blotter upon which transactions of every nature were recorded exactly as they took place. This, then, was the book of original entry. From the day-book, the records were afterward transferred to the journal and from there transferred in summary form to the ledger. The day-book has now almost universally been discarded. Its use called for an immense amount of unnecessary writing and copying with no particular advantage. On the contrary, it afforded a great many opportunities for errors; for it is recognized in bookkeeping as elsewhere that the more often a record must be copied, the greater are the chances for making errors.

104. *Journal.*—With the disappearance of the day-book, transactions were immediately entered in the journal, thus eliminating at least one entry. The journal, then, became the book of original entry, and at the same time the book from which "postings" were made. By the term "postings" is meant the transfer to the proper ledger account of the information contained in the journal. The act of making an entry in the journal is termed "journalizing."

The journal itself may be defined as a book of original entry in which are recorded in chronological order the transactions that take place, showing what accounts should be debited and what accounts credited, and giving either complete details of the transactions or definite references to places where such details may be found.

The simplest form of journal is that shown in Figure 19 with two money columns at the right, the left column being used for debit amounts and the right for credits. The large space to the left is used for the descriptive explanation of the entry and the dates are placed in the center between the entries. In the column headed L. F. is written the pages in the ledger to which the debits and credits of the entry have been transferred.

The double money columns, if totaled at the end of a period, prove only that the journal is in balance—that is, that the debits have been placed in the debit column and that an equal amount of credits has been placed in the credit column. It is no longer customary to add these columns, for the information obtained is of no value if the total debits and credits in the ledger equal each other.

Later it was found that by adding a few money columns and changing the arrangement of the journal somewhat, much time could be saved in posting. Certain entries occurred again and again, making it necessary to post a great many debits or credits to one account. To avoid this an extra debit and an extra credit column for these amounts were added and the totals of the column posted at the end of the period, usually a month. The journal, therefore, took a form similar to Figure 20.

As these entries continued to increase, it became evident that it would require too large a book to accommodate all of the day's transactions. Consequently, instead of providing an extra column for cash, sales, purchases and so on, the use of separate books was resorted to. In the typical business of today, the journal is employed only for unusual entries for which no special books have been provided. While these other books are

JOURNAL

	L. F.	DR.	CR.

FIGURE 19.

JOURNAL WITH EXTRA DEBIT AND CREDIT COLUMNS

ACCTS. REC.	GEN'L	L. F.		L. F.	GEN'L	ACCTS. REC.

FIGURE 20

not called journals, it is readily seen that they are offshoots of the journal, or journals in other forms.

105. *Cash book.*—The first class of entries to be divorced from the journal and placed in a separate book were cash entries. The cash transactions during a month accumulated so rapidly, the receipts came from so many sources, and payments were made for so many different purposes, that the journal became altogether inadequate for recording them.

At first, a simple form of cash book was used, ruled somewhat like the journal with two columns on the right for amounts and with a large central space for explanatory particulars flanked on the left by a date column and a folio column. In the "folio column" are entered the page numbers of a book of original entry from which the entry has been transferred, or those of a book of subsequent entry to which the entry in the book under review has been posted. The principal difference between the cash book and the journal consists in the fact that in the former two pages are used. Upon the left-hand page are entered the receipts and upon the right-hand page the payments (Figure 21).

The cash book, then, instead of the journal, became the book of original entry for all cash transactions. From the cash book postings were made to the ledger. If John Smith paid $100, the fact would be recorded on the left-hand side of the cash book while John Smith's account in the ledger would be credited with $100. At the end of the month all the receipts during the month would be added and the sum posted to the debit of the cash account in the ledger, increasing Asset "cash" in that amount. If $10 were paid for office expense, that item would be entered on the right-hand side of the cash book and posted to the debit of expense

Dr. CASH BOOK Cr.

DATE	L. F.	EXPLANATION	MISC.	TOTAL	DATE	L. F.	EXPLANATION	MISC.	TOTAL

Figure 21

CASH BOOK WITH ADDITIONAL COLUMNS

DATE	L. F.	EXPLANATION	ACCTS. REC.	DIS.	MISC.	TOTAL	DATE	L. F.	EXPLANATION	ACCTS. PAY.	DIS.	MISC.	TOTAL

Figure 22

account or office expense account. At the end of the month all the cash payments made during the month would be totaled and credited to cash account.

As a business grew, however, it was found expedient and time-saving to provide separate columns for, say, freight and express, expense and other frequently occurring transactions. Instead of debiting expense account each time an amount was paid out for that purpose, the bookkeeper would enter the amount in the expense column from which at the end of the period the total of all such charges would be debited to the expense account. Thus, the columnar cash book came into existence (Figure 22). While to many persons a columnar book is a complex, mysterious thing and regarded with awe, it is readily seen that it is only a product of evolution. When its origin is remembered the difficulty vanishes.

In very large concerns where the daily cash transactions frequently are enormous, there usually is one book for receipts and another for payments. Sometimes the division is carried one step farther, two books being devoted to receipts and used on alternate days. Each is thus available for posting on the day when it is not used for entries.

106. *Petty cash book.*—It is now almost a universal custom to separate from the general cash payments these petty expenses that occur during the day. This is only another step in the direction of reducing generalization to specialization, and grouping transactions of a like nature so as to save time and avoid unnecessary duplication of work. The form of the petty cash book varies with the requirements of the business. Figure 23 is a typical form, easily modified to suit given conditions.

The customary method of keeping a petty cash book is the "impressed system." A definite sum is set aside for

PETTY CASH BOOK

DATE	EXPLANATION	GEN'L EXP.	POSTAGE DUE	FREIGHT OUT	FREIGHT DUE	OVER-TIME	MISC.

FIGURE 23

SALES BOOK—SIMPLE FORM

DATE	EXPLANATION	L. F.	TOTAL

FIGURE 24

petty cash purposes and an account in the ledger called "Petty Cash," is charged and remains charged with the amount, so long as the appropriation is unchanged. The amount is turned over to the person in charge of the small expenditures—usually known as *petty cashier.* He now proceeds to make the necessary expenditures, always taking receipts for them. When his cash allotment is almost exhausted he turns the receipts or vouchers over to the general cashier from whom he thereupon receives a check or cash for the amount spent, thereby bringing the petty cash fund once more up to its original amount. The various expenditures are then grouped and entered in the general cash book as if they had been made on that day.

107. *Sales book.*—The sales book is a product of evolution just as is the modern cash book. Formerly all sales were entered in the journal, but when they became too numerous a separate book was provided.

The simplest form of sales book is ruled very much like the journal (Figure 25). The money column at the right is used for the total amount of each sale, while in that on the left is usually entered either amounts of each item in the sale, or the terms of sale.

The operation is simple enough. As a sale is made it is entered in the sales book, and the customer is charged in his ledger account. At the end of the month the total of the sales is credited to a sales account in the ledger.

There is also a columnar sales book which is provided for a business desiring to keep its sales of various products apart. A dry goods concern, for instance, may wish to know what were the sales in notions, ladies' garments, shoes and millinery. In that case, separate accounts for these sales would be opened in the ledger and separate

COLUMNAR SALES BOOK

DATE	EXPLANATION	L. F.	WHEAT	CORN	OATS	GEN'L.	TOTAL

FIGURE 25

COLUMNAR RETURN BOOK

DATE		L. F.	WHEAT	MISC.	TOTAL

FIGURE 26

columns would be ruled in the sales book. The totals of the columns would be credited to the proper sales accounts at the end of, say, each month. Figure 25 illustrates the ruling of a columnar sales book which might be used in such a case.

In some instances, however, separate sales books are used for each kind of sales, especially where separate bookkeepers are assigned to the entering of sales for the separate departments.

In some of the very large business establishments, there may be from ten to twenty sales books. Of these one may be used for sales to customers whose names begin the letters A, B or C (known as Sales Book A—C), another for sales to customers whose names begin with D, E or F (known as Sales Book D—F), and so on. No matter how many separate sales books there may be, the principle is not changed. All the books taken together form but one sales book; they are separated merely for the sake of convenience, so that if necessary a corps of bookkeepers may all be at work on sales at the same time without interfering with each other.

108. *Return book.*—In many businesses, the returns are not large enough to warrant the use of a separate book. In such cases they are entered in the journal. As soon as returns become sufficiently numerous, a return book is opened. In its arrangement it is similar to the sales book except that the entries are reversed. Instead of charging the customer, he is credited; instead of crediting the various sales accounts, they are debited, or return and allowances accounts are charged. If necessary, the return book may also be divided into several books in order to permit several bookkeepers to work upon them at the same time. Figure 26 is an example of a columnar return book, the simple form being

COLUMNAR PURCHASE BOOK

DATE			L. F.	WHEAT	CORN	MISC.	TOTAL

FIGURE 27

VOUCHER REGISTER

DATE	VOUCHER NO.	EXPLANATION	DT. PD.	WHEAT	CORN	OATS	MISC.	TOTAL

FIGURE 28

ruled exactly like the simple form of sales book (Figure 24).

109. *Purchase book.*—The purchase book is another off-shoot from the journal. When credit purchases became numerous, it was found convenient to enter them in a separate book. As we shall see later, when a purchase is made, some account—either asset or economic—must be charged, and the person or concern supplying the material, credited. In nearly every business there are many purchases of merchandise or raw material, supplies of various sorts and other items that may be grouped. It was found economical to provide for these groupings in a purchase book or books, rather than afterward to analyze a single account in the general ledger into which they had been thrown. Hence, we find columnar purchase books, similar to Figure 27, performing about the same services for purchases that the sales book performs for sales. Instead of charging merchandise, supplies, or similar accounts when the purchase is made, the amounts are entered in special columns and the totals are charged at one time, usually at the end of each month.

110. *Voucher register.*—Ordinarily, however, the purchase book is used only for credit purposes. Material bought for cash is immediately entered in the cash book. But many concerns make only very few cash purchases, instead paying their bills on certain days of the month; as, for example, the 10th, 20th and 30th or 31st. This practically amounts to cash payments, especially where a cash discount is allowed for payment within ten days or a similar short period. Under these circumstances, no accounts are opened for the persons or firms from whom purchases are made (except in some instances where payments are made monthly or more infrequent-

ly). A voucher register similar to figure 28 is kept. Each bill is entered on a standard size voucher, consecutively numbered. The vouchers are filed under payment date, and when payments are made are entered in the voucher register; the amounts are distributed among the proper columns so that the right account may be charged in bulk at the end of the period. Instead of crediting various creditors' accounts, one account, called "Voucher Register," or some other descriptive name, is credited from the voucher register, and this account is charged from the cash book, thus maintaining a check upon the accuracy of the work. The details of the system will be explained further when the actual operation of the books mentioned in this chapter are illustrated.

111. *Bill and charge systems.*—It has already been pointed out that a book of original entry need not necessarily be a bound book; nor for that matter any kind of book. If a notched stick is admissible evidence in a court of law, then a loose sheet of paper with intelligible characters written upon it must also be admissible evidence. As a matter of fact, it has so been held in a number of cases. A duplicate sheet, however, would not be good evidence, hence one must be able to show clearly that the record is the original.

The sales book, in order to be a book of original entry, must have the sale entered immediately. This practice, however, was found cumbersome. Sales clerks could not very well carry about heavy books. A system of sales or charge slips is now in common use. These slips are numbered consecutively—one proof of their being original, the number being printed at the same time that the slips are printed. Instead of being entered immediately in the sales book, the sale is entered upon one of these slips which thereby becomes a book of original entry.

The sales book thus becomes merely a subsequent medium of posting, and occupies about the same relative position as that occupied by the journal in its relation to the day-book.

In order still further to eliminate needless operations and entries and thereby reduce the possibilities of error, many business houses now merely summarize the sales slips on adding machines, making a periodical summary journal entry direct from the slips. In some cases, slips are placed in envelopes with the summary on the outside, in others they are bundled with summaries on sheets wrapped around the bundle. In many cases, however, this is not advisable, nor is it always possible—especially where the charge sales are numerous. In such instances, a billing machine is frequently employed. With the aid of such a machine, it is possible by manifolding to fill in the customer's bill, the sales entry and, frequently, the ledger card, at one writing. Sometimes as many as fifteen records are made at the same time.

112. *Other books of original entry.*—In a similar manner, slips are often used to record purchases, thus making the purchase book a posting medium merely. In the handling of purchases, even the receipt book, if it shows exactly what material was received and constitutes the authority upon which the approval of the bill and the entries in the purchase book or voucher register are based, would be a book of original entry.

In some houses, the cashier has a cash sheet upon his or her desk on which are recorded the cash receipts as they come in. In such an instance, the cash sheet would be a book of original entry. Often, however, the cash sheet is bound into a loose-leaf cash book, to serve, also, as a posting medium.

Even entries in the journal are often only secondary

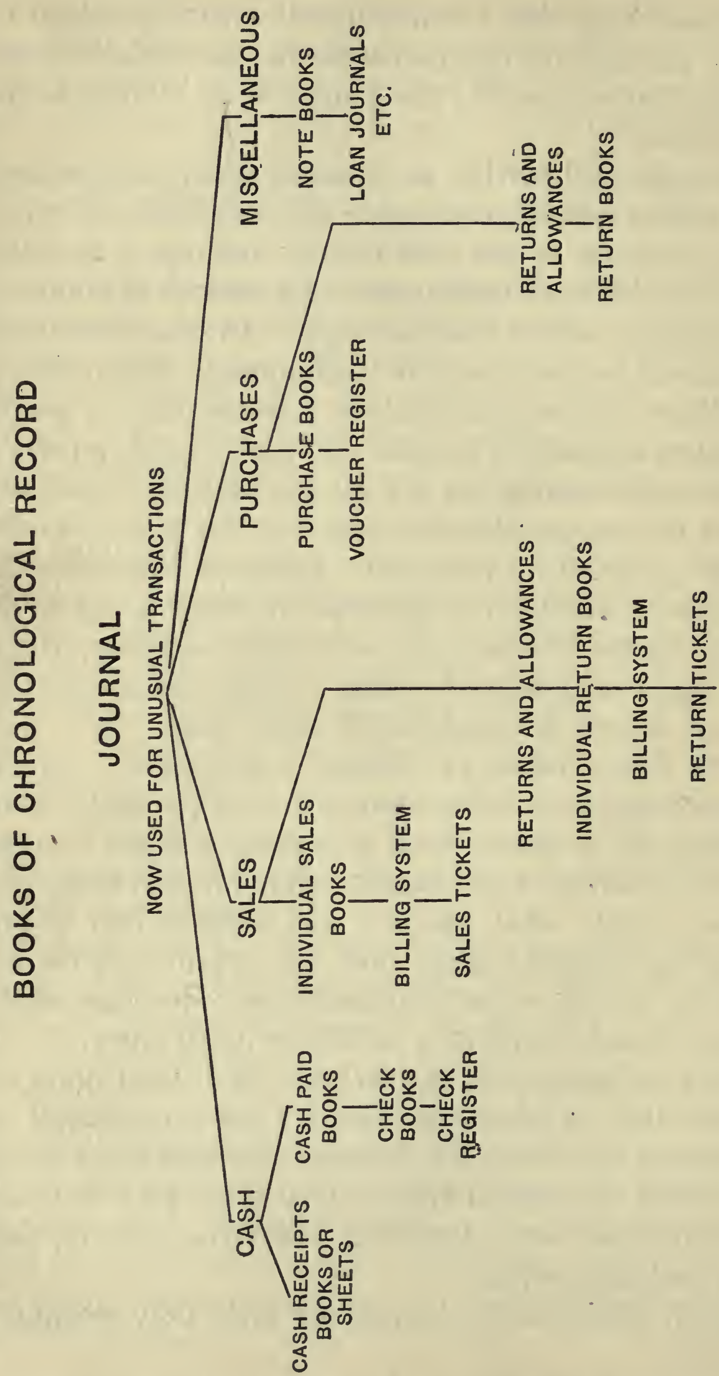
BOOKS OF CHRONOLOGICAL RECORD
JOURNAL
NOW USED FOR UNUSUAL TRANSACTIONS
CASH
CASH RECEIPTS BOOKS OR SHEETS
CASH PAID BOOKS
CHECK BOOKS
CHECK REGISTER
SALES
INDIVIDUAL SALES BOOKS
BILLING SYSTEM
SALES TICKETS
RETURNS AND ALLOWANCES
INDIVIDUAL RETURN BOOKS
BILLING SYSTEM
RETURN TICKETS
PURCHASES
PURCHASE BOOKS
VOUCHER REGISTER
RETURNS AND ALLOWANCES
RETURN BOOKS
MISCELLANEOUS
NOTE BOOKS
LOAN JOURNALS
ETC.

Figure 29

entries, thus eliminating the journal as a book of original entry. In some concerns—the large packing companies, for example—a slip for each journal entry is prepared and approved by one or more officials. These slips are called journal vouchers and serve as books of original entry.

A careful consideration of the books thus far explained shows clearly that the journal is the parent of them all. Were it not for the time and labor they save, these separate books might readily be combined into one large journal. The non-professional accountant may at times become confused and lose his way among the ramifications and complexity of subsidiary books. He will easily find his way out, however, if he bears in mind the foregoing simple fact. The chart illustrated in figure 29 may aid in placing the relations of the subsidiaries of a journal. The day book may be eliminated from consideration, since it has been discarded from modern accounting practice.

CHAPTER X

LEDGERS

113. *Purpose of ledger.*—The books explained in the last chapter are, in a sense, convenient channels specially designated and labeled, each carrying certain information to a place where it may be assembled for practical interpretation and use. This place is the ledger. Standing by themselves, these books of original entry and their aids—the posting mediums—are of little value except, as already explained, for the purpose of proving individual transactions. The management of a business would be hard put to it if forced to rely upon the posting mediums for the information upon which to base the direction of the business. It would be necessary to analyze each book and prepare some kind of summary which would tell in resultants to what extent the business had prospered, and why, or to what extent it had failed to prosper, and why; how much it owns and how much it owes; what is the worth of each individual member, and so forth.

The ledger performs this function. While it does not quite represent the final form in which summaries are desired, it permits the latter to be obtained with very little difficulty.

The ledger, in other words, is an aggregation of accounts. These may be divided into five distinct classes, namely: Asset accounts, liability accounts, profit accounts, loss accounts and proprietary accounts. By referring to the definition of these terms already given in

SIMPLEST FORM OF LEDGER

FIGURE 30

CUSTOMERS' AND CREDITORS' LEDGER

			L.F.	Dr.		Cr.		Bal.	

FIGURE 31

Chapter VIII, the reader should experience no difficulty in understanding just what information each class of accounts is intended to convey.

114. *Simplest form of ledger.*—In common with the journal, the ledger has undergone a process of evolution, and has been subjected to considerable sub-division. The simplest form of ledger is that in which all the accounts are included between the two covers of one book. The ruling resembles that shown in Figure 30. The charges are entered on the left hand side, the credits on the right, and the balance on the side which is the smaller of the two.

It is customary to divide the ledger into three parts. In the first part are placed assets and liabilities (except customers' and creditors' accounts), profit accounts and loss accounts with customers in the second, and in the third accounts with creditors.

115. *Customers' ledger.*—It was natural that, as accounts grew more numerous, an attempt should be made to reduce the size of the ledger. The first step in that direction was to eliminate the accounts with customers and place them in a separate ledger. Thus the *customers' ledger* came into being.

Instead of, as formerly, posting from a sales book to a customer's account in the general ledger, the posting was now made to his account in the customers' ledger. Credits were similarly made direct to the customers' ledger. This ledger is now sometimes known as the *accounts receivable ledger*.

A controlling account, however, is kept in the general ledger. By "controlling account" is meant an account in which are entered in total the charges and credits entered in detail in the subsidiary ledger accounts.

Ordinarily, for example, each sale, unless it is a cash

sale, is immediately charged to the customer's account. At the close of the accounting period the total of these individual charge sales is found—on accounts receivable column in the sales books. This total is debited in one lump sum to the accounts receivable controlling account in the general ledger. On the other hand, when a customer sends in a remittance on account or returns goods which he had purchased, his account is credited with the amount of the remittance or of the return. At the close of the period the total cash received from customers as shown in the cash book, and the total returns as shown in the returns book, are credited in lump sums to the accounts receivable controlling account. Any miscellaneous debits or credits which cannot conveniently be bulked, are posted to the controlling account at the same time that the individual item is posted to the customer's account in the accounts receivable ledger. Since each debit and each credit in the customers' ledger is represented by a debit or credit in the controlling account—except that the debits and credits are bulked in this latter account—it is clear that the total of the balances in the customers' ledger will equal the balance in the controlling account.

116. *Purchase ledger.*—The next group of accounts to be separated from the ledger was that of concerns from whom purchases were made—in other words, creditors. A subsidiary ledger, variously known as purchase ledger, creditors' ledger or accounts payable ledger, was opened and an accounts payable controlling account kept in the parent ledger.

The purchase ledger is handled in the same manner as the customers' ledger. Each purchase account is credited from the purchase book (Figure 27) and the total of the accounts payable column in that book is

credited to the accounts payable controlling account, in the general ledger. Cash payments and returns are charged individually to creditors' accounts and credited in lump sums to the accounts payable controlling account. The latter account, then, "controls" and keeps in balance with the individual accounts in the subsidiary ledger.

At times, controlling accounts are kept in the customers' and purchase ledgers, so that the individual bookkeeper may know whether or not his ledger is in balance. More frequently, however, this is not done. Many consider it desirable that the controlling account be in the hands of another person who thus has a check upon the bookkeeper's work.

117. *General ledger.*—With the customers' and creditors' accounts thus eliminated, we have left what is known as the *general ledger*, consisting of what formerly constituted the first group of accounts at the time when all the ledger accounts were kept in one book.

The term ledger is sometimes used as if it were confined to a single book. As a matter of fact, it has a broader meaning. Very often, for example, no cash account is kept in the general ledger, the cash book itself being the cash account. In that case, the cash book is not only a posting medium, but a ledger account in the truest sense. Similarly, the customers' and the creditors' ledgers, though separate books, are, nevertheless, part of the main ledger. There may even be other records which, though forming no part of the ledger book, must be counted among the ledger accounts. Such, for example, would be a record of the inventory which is entered only occasionally—every six or twelve months. The inventory represents a very material asset, but it fluctuates constantly. The fluctuation is not reflected

in the ledger, so that the inventory account in that book may not represent the actual amount of the inventory—especially during the time intervening between the taking of it and the closing of the books. The inventory record therefore becomes a subsidiary ledger record.

118. *Private ledger.*—The general ledger, as has already been pointed out, contains information of vital importance to the management of the business. This information would also be of great importance to competitors if it were available to them. Such matters as salaries of important officials, profits made on sales, the financial interests of the proprietors and similar facts of an intimate nature are often kept in what is known as a "private ledger." This ledger is placed in charge of some important officer responsible direct to the management. Not even the highest-paid bookkeeper has access to it.

Such accounts as real estate (if the amount of real estate holdings is to be kept confidential), mortgages and bonds due, profit and loss and capital accounts are simply eliminated from the general ledger and placed in the private ledger. Entries which are made in these accounts are debited or charged in the general ledger to an account called "private ledger." In the private ledger, an account called "general ledger" is kept to offset the entries in the various accounts maintained in that ledger. The balances in these two offsetting accounts should equal each other, though one will necessarily be a debit and the other a credit.

119. *Loose leaf and card ledger.*—In the bound ledger, a great deal of space is wasted owing to the fact that not all the accounts are of equal length. Moreover, in the making of a bound book, it is necessary to provide enough blank pages for requirements during a definite

period, usually from two to five years. Until these blank pages are filled, much energy is wasted in handling a book so much heavier than demanded by present requirements. Moreover, when the pages are filled, many of them are rarely referred to again, thus needlessly cumbering the book and resulting in wasted energy. When the ledger is filled, it is necessary to transfer all the active acounts to a new book.

For these reasons, loose leaf ledgers and card ledgers have been introduced. They have been objected to on the ground that they are not good evidence in the courts; though this objection does not appear to be well taken inasmuch as ledgers are not books of original entry and for that reason would not be regarded as good evidence in either case unless the transactions were actually recorded in the ledger account as soon as they took place, without first passing through subsidiary posting mediums.

The strongest objection to loose-leaf ledgers is made by the accountant who realizes the possibility of substitution of papers and cards, as well as the temptation they offer the bookkeeper to manipulate accounts for dishonest purposes. As long as locks, systems of checking and other safeguards are required, loose-leaf and card ledgers cannot be considered so safe as the bound book from which pages cannot easily be taken without detection.

For this reason, most accountants, while recognizing the desirability of loose leaf or card records for customers' and purchase accounts, insist upon bound books for general and private ledgers.

120. *Ledger rulings.*—For the general and private ledgers, the old standard ruling illustrated in Figure 30 is still used. There seems no good reason for changing

LEDGER ACCOUNT FOR SPECIAL CASE

FIGURE 32

BOSTON LEDGER

	Bal.	Dr.	Cr.	Bal.	

FIGURE 33

it, except in the case of commission houses where special forms, are generally used. These, however, need not be described here.

For the customers' and creditors' ledgers many different forms are used. The most common is the triple column, illustrated in Figure 31. It saves considerable space by allowing from one to six accounts upon a page. The first money column is used for the debit amounts, and the second for the credits. In the third the running balance is entered as soon as a change takes place in the status of the account.

It frequently seems advisable, especially in retail stores, to enter the details of transactions in the ledger account so as to avoid having to go back to original records. Special forms must be provided for special cases; the form in Figure 32 is given merely to indicate the general appearance of a ledger account of this kind.

121. *Boston ledger.*—It may be well to mention here a special kind of ledger which, while not in universal use, is sometimes adapted to cases in which there are numerous daily entries, such, for example, as the cash deposits and payments in a bank. The Boston ledger, which was first used by banks, is arranged with the names of the accounts written or printed one under the other, along the left-hand side of a large book. Across two pages are printed a series of columns (Figure 33). One set of columns is allotted to each name. There are three money columns—one for debits, one for credits and one for balances. Inasmuch as most of the entries are deposits or withdrawals, there are very few explanations to make. Memorandum columns, however, are provided for entries which require some explanation or a reference to other records. While this ledger is a great time saver and permits a rapid daily abstract to be made

of the financial standing of the concern, it is not generally practicable because of the difficulty of analyzing the ledger accounts. It is evident that an attempt to trace all the debit and credit entries in any one account would be a tedious and time-wasting task. In a commercial establishment, the time saved in making the daily entry would not offset the time lost afterward in analyzing the account.

122. *Grouping of accounts.*—In arranging the accounts in a general ledger, some attention should be paid to grouping. Those accounts which naturally fall into one class should be placed close together. In many cases the following arrangement will be found satisfactory:

1. Fixed assets accounts,
2. Current assets accounts,
3. Fixed liabilities accounts,
4. Current liabilities accounts,
5. Profit accounts,
6. Loss or expense accounts.

This grouping will be found convenient in the preparation of statements, the details of which will be explained as we proceed.

123. *Sub-dividing accounts.*—In recent years much progress has been made in the development of analytic or scientific accounting. The fact, for example, that $10.00 spent for office stationery represents an expense which must be deducted from the profits, does not nowadays justify placing that $10.00 in a general expense account. In other words, there is a growing tendency to gather together into groups items of a like nature and to avoid mixing in one's accounts profits from

various sources and expenses of different kinds. Thus while formerly the general expense account was a dumping ground for all expenditures that the bookkeeper could not properly classify, it is now either eliminated altogether or used only for such expenses as may occur perhaps once or twice a month, and which really are of such a general nature that they cannot be classified with any particular benefit.

The old expense account has been subdivided into a number of minor accounts, such as office stationery, office postage, telegrams out, telegrams in, freight and express out, freight and express in, and the like. Such minute subdivision facilitates much closer supervision over details, which frequently require careful watching. In a properly arranged statement of profits and losses, these minor accounts are grouped under distinct general headings, permitting a much more definite interpretation of what the different departments in the business are doing than was the case in the days when it was considered sufficient that the amount was charged to expense and not to asset, or credited to income and not to liability, as the case might be.

124. *Status of journal and ledger.*—As we have seen, there are two groups of books which could really be combined into two single books, namely, the journal and the ledger. Under modern, complex business conditions, the subdivision of the journal and ledger into subsidiary books, and the further subdivision of these subsidiary books and accounts has been carried to a very fine point, all having definite purposes in view. We are now ready to examine more closely the details of these books of accounts and to inquire what entries are to be placed in them, and why, and how.

CHAPTER XI

OPENING ENTRIES

125. *Opening of records.*—When a new business is started, no matter whether it is a reorganization or an entirely new enterprise, it is wise immediately to open a set of accounting books. It often happens, especially in the case of young men who have had little or no previous experience in the management of an enterprise, that in their anxiety to establish their own business, they concentrate their attention altogether upon the plans of organization, manufacturing and sales, and delegate to a future and more opportune time, "the writing up of the books." This neglect may prove expensive. For not only may the records become so confused that experts must be employed to untangle them, but what is more important, the young promoters or entrepreneurs fail to get a first firm hold upon the helm. The early days in the life of a business often prove the most critical. Plans of manufacturing and selling are tested in order that the soundness of its business policies may be determined at the earliest moment. But for the same reason it is important to know exact costs and profits. Many a business has failed because this and similar information was lacking at the outset—the managers took for granted what should have been carefully ascertained, or miscalculated where they might have built their estimates on exact facts and figures.

It should be established, therefore, as a definite, fixed policy, that accounting books should be opened immedi-

ately a new business is started. In this chapter we shall discuss the details of the first necessary entries.

126. *Basis of entries.*—When a person embarks in business, he generally invests a certain amount of capital in the undertaking. With this capital he purchases whatever machinery, merchandise and other assets are necessary to carry on the business. Usually, when two or more men form a partnership, each contributes something, either cash, property or skill. An agreement is or should be drawn, setting forth what each partner is to contribute, what he is to receive and what are his rights under the agreement. When a corporation is formed, certain legal documents are drawn up and meetings of the stockholders and directors are held. Among these documents, those of interest from an accounting point of view, are the acceptance of the certificate of incorporation, bills of sale (if one or more properties are taken over), receipts from the state and county authorities for fees paid, minutes of the first meetings of stockholders and directors, and the by-laws that have been adopted.

Where the business is owned by an individual the bookkeeper or accountant in opening a set of books must rely upon the facts which have been given him verbally, and upon the bank and check book as showing the investment of the capital. In the case of a partnership, the partnership agreements form the basis for the opening entries, and any additional facts should be attested by all the partners, preferably in writing. The details of the organization of a corporation are found in the documents, minutes and by-laws referred to. These should be examined with extreme care.

127. *Importance of complete details.*—The essential facts contained in these documents should be entered in

the books of account. It is not recommended that the by-laws should be copied or that similar details of organization should appear. But whatever has to do with the acquisition, disposition and distribution of the company's assets and liabilities should appear in the opening entries so that such items may be referred to without having to search for the original documents. These opening entries are frequently referred to, especially in the early stages of the business. Whoever makes the entries should remember that they are to be understood by anyone who has a right to inspect them. A knowledge of bookkeeping or accounting should not be necessary for this. The facts should be presented in sufficient detail and with references to sources of information, so that the transactions may be clear to any intelligent person who examines them.

At this point, it should be explained that it has become customary to express any kind of entries in a double entry set of books by illustrating them in journal entry form. In other words, since all the other posting mediums are offsprings of the journal, it is understood that a cash entry expressed in journal form would, in actual practice, be placed in the cash book, if one were kept, or that a sales entry similarly expressed would be placed in the sales book, and so on.

A journal entry is commonly expressed as follows:

Cash	$1,000.00	
John Smith		$1,000.00
Received from John Smith $1,000.00 in payment of invoices dated January 1, 19—.		

This means that cash account is debited and John Smith's account is credited. Formerly the entry was

surrounded with symbols which now have become obsolete since the entry in the simple form just given is perfectly well understood. One sometimes still finds, however, a journal entry in the following antiquated form:

Cash Dr.	$1,000.00	
To John Smith Cr.		$1,000.00

The "Dr.," "Cr." and "To" have now been dropped.

128. *Opening entry for individual and partnership.*—Let us assume that John Smith decides to go into a retail business, and that he invests $5,000 which he has accumulated. He rents a store on the corner of Jones and Adams Street at $75 a month. Of his capital $600 is spent for counters, shelves and other store fixtures, and $2,000 for a stock of merchandise with which to begin business. He has left, therefore, $2,400, which is available for advertising and for such expenses as will be necessary until the business becomes profitable.

To record these transactions, the following entries might be made:

Cash	$5,000.00	
John Smith		$5,000.00

Today entered the retail business, investing $5,000 and renting a store at Jones and Adams Streets at a monthly rental of $75.00.

This is really the only opening entry. It shows that the business now has an asset of $5,000 in cash, the cash account being debited on the ledger in that amount. To offset this, John Smith owns a $5,000 share in the business, which, in this case, means that he owns the business. His account is credited in the ledger. The ledger is thus

in balance at the outset. We have, theoretically, "increased" our asset (cash) which constitutes the debit and "increased" the proprietorship (John Smith) which constitutes the credit.

Some accountants hold that inasmuch as John Smith's account is credited, the business owes him that amount and the account is therefore a liability. The disagreement over this point is merely one of technical expression. It makes no real difference in actual practice whichever view is held. In this simple case, however, it is certain that if John Smith were asked "What are your assets and what are your liabilities?" he would say, "My assets are $5,000 in cash and I have no liabilities." It seems somewhat unnecessary to say, merely for the sake of correct technical expression, that John Smith owes himself. He actually owns the equity in his business, which is always the difference between the assets and the liabilities. The case would be exactly the same if there were partners or stockholders in the business. The partners or stockholders jointly own the difference between the assets and liabilities, just as they would own the equity in a house and lot to which they held title but upon which there was a mortgage.

Having thus made the opening entry, we may now proceed to record the opening transactions. Inasmuch as these are all of a cash nature, they would, in actual practice, be entered in the cash book. Expressed in journal entry form, these entries would be as follows:

Store fixtures	$600.00	
Merchandise inventory	2,000.00	
Cash		$2,600.00

Purchased today from Abraham Powells a stock of merchandise as listed in invoice dated January 2,

19—; also paid Mark Brown $600 for the erection of counters, shelves and other store fixtures, as noted on his bill dated January 2, 19—.

In other words, our cash asset being now reduced it is credited with $2,600. But our store fixture asset has been increased (in this case, created) by $600. The merchandise inventory is another asset, and is debited accordingly.

If now we were to make an abstract of our ledger accounts, we should find that the debits added together would equal the credits, thus proving that the ledger is still in balance.

If instead of starting business by himself, John Smith had arranged to go into partnership with William White and James Thurston, each contributing $5,000, and sharing equally in the profits and losses as well as in the management, the opening entry would have been:

Cash	$15,000	
John Smith		$5,000
William White		5,000
James Thurston		5,000

To record the partnership of White, Thurston and Smith, John Smith having invested $5,000, William White having invested $5,000 and James Thurston having invested $5,000, the partners to share equally in the profits and losses as per partnership agreement dated ———, a copy of which is filed with the ——————— Trust Company.

Whatever expenditures are made are entered in exactly the same manner as those illustrated in the case of a business owned by an individual.

129. *Opening entries for corporation—shares all paid.*

—The opening entries for a corporation are somewhat more complicated and formal. It is advisable to set forth the essential details of the incorporation. Such entries have gradually assumed more or less a standard form.

If we take a corporation starting with a capital stock of $100,000, each share at a par value of $100 and all the capital paid into the treasury of the company, the following entry in the journal would be satisfactory:

THE A, B, C COMPANY
Incorporated Under the Laws of the
State of ——————
with an
AUTHORIZED CAPITAL
of
$100,000

Divided into 1,000 Shares, par value of $100 each

Cash	$100,000	
Capital stock		$100,000

To record the incorporation of this company after paying in by the stockholders of $100,000 par value of the stock issued to them. Stock ledger page ——.

The capital stock account in this case bears the same relation to the other accounts as does the John Smith account in the case of an individual, or the various partners' accounts in the partnership. It is not a liability, but a proprietary account. The difference between the capital account and individual owners' account is not evident at the beginning, but becomes marked as profits accumulate. The capital account remains the same always unless the capital stock is either increased or decreased by legal procedure. The accumulated profits

are thrown into another account called "surplus," while in the case of an individual or partnership, the profits are added to their individual capital accounts.

130. *When shares are subscribed but not paid in.*—If, in the case of the A, B, C corporation, the stockholders had merely subscribed for the stock and not paid for it, they would be at the same time owners and debtors of the business. The corporation could proceed against them and collect the amount which they had agreed to pay for the stock. This shows that a subscription to a share of stock is in fact a contract.

The opening entry in that case would be:

THE A, B, C COMPANY
Incorporated Under the Laws of the
State of ——————

with an
AUTHORIZED CAPITAL
of
$100,000

Divided into 1,000 Shares, par value of $100 each

Subscriptions	$100,000	
Capital stock		$100,000

To record the following subscriptions to the capital stock of the company—A, 100 shares; B, 500 shares; C, 200 shares; D, 200 shares.

131. *When shares are partly paid.*—Frequently, all the stock is subscribed for, but only part of the subscriptions are paid at the beginning, the balance to be paid either in regular periodical instalments or when called for. In such a case, the opening entry would be:

THE A, B, C COMPANY
Incorporated Under the Laws of the
State of ————————
with an
AUTHORIZED CAPITAL
of
$100,000

Divided into 1,000 Shares, par value of $100 each

Subscriptions	$100,000	
Capital stock		$100,000
To record the subscription to capital stock of this company as follows: A, 100 shares; B, 500 shares; C, 200 shares; D, 200 shares.		
Cash	$50,000	
Subscriptions		$50,000
To record the payment of 50 per cent of the stock subscribed for as follows: A, $5,000; B, $25,000; C, $10,000; D, $10,000.		

It will be seen that the company has two assets, one cash of $50,000 and the other a right against A, B, C and D for a combined sum of $50,000. In reality this right is of the same nature as accounts receivable.

Sometimes, too, the stock is only partly subscribed. In this case, for example, instead of subscribing for the full amount and paying in only one-half, the stockholders may have subscribed for $50,000, leaving $50,000 unissued. (Unissued stock, by the way, is sometimes erroneously called treasury stock. It is not treasury stock, as will be explained later.) The entry in a case of this kind would be:

THE A, B, C COMPANY
Incorporated Under the Laws of the
State of ————
with an
AUTHORIZED CAPITAL
of
$100,000
Divided into 1,000 Shares, par value of $100 each

Subscriptions	$50,000	
Unissued stock	50,000	
Capital stock		$100,000
To record subscriptions to capital stock of this company as follows: A, 50 shares; B, 250 shares; C, 100 shares, and D, 100 shares.		
Cash	$50,000	
Subscriptions		$50,000
To record the payment of the subscriptions placed by the above named stockholders.		

These cases illustrate simple transactions, but the principles are the same in the more complex cases. If, for example, the partnership agreement had contained numerous provisions as to the rights and liabilities of its partners, the essential features of the agreement would have been recorded in the explanatory part of the entry. If the corporation had been formed to take over a partnership, or a number of corporations, the entries would have been more detailed. For the present these illustrations will be sufficient to enable us to proceed with the operation of a typical set of books. In later chapters the various complications that are introduced in special circumstances will be made clear.

CHAPTER XII

SET OF ACCOUNTS ILLUSTRATED

132. *Importance of following each step.*—Probably the most satisfactory way to fix firmly in one's mind the significance, from an accountant's point of view, of the various transactions that take place in ordinary business routine, is actually to perform the work of opening a set of books, entering the transactions as they occur, and closing the books at the end of the period. The reader is advised to provide himself with a number of sheets of plain paper of letterhead size and to rule the sheets in the manner indicated in the forms illustrated in this chapter. He should then follow carefully the discussion in the text and make the entries indicated. Only in this way can one not especially familiar with accounting procedure, clearly comprehend the various interesting situations that arise from time to time. Moreover, this is an ideal way to become familiar with accounting methods, so that when more intricate discussions are encountered they will be easily understood. Unless each step in this chapter is fully understood before the next is taken, the purpose of the chapter—which is to provide the reader with a *practical working* knowledge of the mechanism of a set of accounts—will be defeated.

The present set has been selected because it illustrates most of the principles that enter into the proper keeping of a set of accounting books. The details are, of course, peculiar to this one business; but if we were to change the name of the product we could apply the same

methods with only slight modifications to a great many other lines of business. The purpose, however, is not to illustrate a model set of books to be copied, but rather to set forth clearly the "how" of accounting and to demonstrate the simplicity of correct accounting methods. The reader will discover that, so far as routine bookkeeping is concerned, the problem is almost entirely one of simple arithmetic.

For the sake of clearness such details as the prices of goods and simple calculations of discount and interest have been omitted; as it is believed the reader is more or less familiar with these trade practices.

133. *Nature of the enterprise.*—Albert Brown, who formerly held an important executive position in the hat industry, has decided to invest part of his savings in a wholesale hat establishment. He has $10,000 available for investment. His wide circle of acquaintance among hat manufacturers has enabled him to establish satisfactory relations for the handling of stiff and soft felt hats, women's felt untrimmed hats and men's and women's straws. Mr. Brown estimates, on the basis of his past experience, that a capital of ten thousand dollars is sufficient for the enterprise.

134. *Opening the business.*—Accordingly, on September 1st, Mr. Brown leases an office and salesroom at 900 Broadway at a yearly rental of $1,500, payable monthly. The next day he buys from the Herbert Desk Company, five desks, a safe, a typewriter, chairs, linoleum, rugs and other furniture for the office and show room, the total cost of which is $930 to be paid in thirty days. He also contracts for shelving, partitions and long tables to be erected immediately.

On the following day, that is, the 3rd of September, he receives and pays for account books and stationery

costing $58. As soon as his account books are received, he decides to put his accounting system in operation.

In the previous chapter we learned that the first step in a case of this kind is to enter the capital with which the business is started. Since Mr. Brown contributed the entire $10,000 in cash, it is advisable in addition to entering the transaction in the cash book to place a memorandum in the journal as a matter of information in case we shall later have occasion to refer to the details surrounding the opening of the business. Such journal entry is not, however, absolutely necessary, and may be left to the judgment of the proprietor or accountant in each case.

The cash book, as has already been explained, is usually divided into two parts, cash received and cash paid. In our case it will be satisfactory to employ one book for both cash received and cash paid, using the left-hand page for the former and the right-hand page for the latter. The form of the book may, in a general way, be established even at this early date. We know that we shall have accounts with customers many of whom in all probability will deduct a cash discount from their bills (our terms being 2 per cent, 10 days; 30 days net). There will no doubt also be receipts from other sources from time to time. The columns provided in the cash book illustrated on page 156 will in all likelihood be satisfactory for the present, just as the form on page 157 for the "cash paid" side will serve us until the payments become more numerous.

Our first entry is to credit Albert Brown's capital account and to charge cash with ten thousand dollars. The latter we enter on the "cash received" side of the cash book. The charges to cash are entered in the net cash column; the credit to other accounts are indicated

1. **CASH RECEIVED** 1.

SEPTEMBER. 19__

DATE	L.F.	PARTICULARS		CUSTOMERS' ACCOUNTS		CASH DISCOUNTS ALLOWED		GENERAL		NET CASH	
1	8	ALBERT BROWN CAPITAL - DEPOSITED TOTAL CAPITAL WITH FIRST NATIONAL BANK						10,000	—	10,000	—
15	6	NOTES PAYABLE BORROWED FROM H.C. MARKS ON 3 MONTHS NOTE @ 6%						3000	—	3000	—
19	Cu. 8	HANEY & CO.	BILL 9/7	100	—	2	—		—	98	—
20	Cu. 12	LANDBERGER & CO	" 9/9	230	—	4	60			225	40
	Cu. 2	THE CLARK STORES	" 9/9	85	—	1	70			83	30
	Cu. 14	PLAUTENBERG & CO.	" 9/9	300	—	6	—			294	—
	Cu. 15	TURNER BROS.	" 9/9	75	—	1	50			73	50
	Cu. 9	THOS. HANNAWAKER,	" 9/9	635	—	12	70			622	30
23	Cu. 5	DRAWBRIDGE & COLER	" 9/11	445	—	8	90			436	10
24	Cu. 3	CARHART & MACKSEY	" 9/12	40	—		80			39	20
30	Cu. 6	FORMAN DRY GOODS CO.	" 9/18	300	—	6	—			294	—
	Cu 16	TATE & TOWN	" 9/18	70	—	1	40			68	60
				2280	00	45	60	13,000	00	15,234	40
		SUMMARY:									
30	28	CASH	15,234.40								
	29	CASH DISC'TS LOST	45.60								
	2	CUSTOMERS' CONTR'L'G ACCT. 2280.00									
	POSTED	GENERAL 13,000.00									

CASH PAID

2

SEPTEMBER, 19___

DATE	L.F.	PARTICULARS	CREDITORS' ACCOUNTS		CASH DISCOUNTS REC'D		GENERAL		NET CASH	
1	13	RENT-PAID RENT FOR SEPTEMBER					125	—	125	—
3	9	STATIONERY AND SUPPLIES-ACCOUNT BOOKS ETC.					58	—	58	—
4	14	ADVERTISING EXPENSE-ANNOUNCEMENTS					174	50	174	50
5	4	SALESMAN'S ADVANCES-TATTERSAL'S EXP. ACCT.					100	—	100	—
	1	FURNITURE & FIXTURES-ADVANCED CABINET-MAKER					100	—	100	—
	14	ADVERTISING EXPENSE-SIGNS					45	—	45	—
7	15	SALARIES-STOCK CLERK					12	—	12	—
	1	FURNITURE & FIXTURES-SAL. OF CONTRACT FOR SHELVES ETC.					250	—	250	—
10	3	PETTY CASH					50	—	50	—
12	17	TRAVELING EXPENSES-TATTERSAL					61	40	61	40
	18	GENERAL EXPENSE					20	50		
		CARFARE 2.30 — PETTY CASH BOOK PAGE 1								
		TELEGRAMS 3.20								
		POSTAGE 15.00								
	19	EXPRESS & FREIGHT INWARD					7	50		
	20	EXPRESS & FREIGHT OUTWARD					6	50	34	50
14	1	CAREY-HART HAT MFG. CO.-BILL SEPT. 4	1000	—	30	—			970	—
	15	SALARIES-STOCK CLERK					12	—	12	—
	21	ALBERT BROWN DRAWING ACCT-PERSONAL					100	—	100	—
15	5	MOWBRAY HAT CO.-BILL 9/5	1791	—	89	55			1701	45
	6	TAYLOR HAT CO. " 9/5	1232	—	61	60			1170	40
18	18	GENERAL EXPENSES					11	60		
		CARFARES 1.60 — PETTY CASH BOOK PAGE 1								
		POSTAGE 10.00								
	9	STATIONERY & SUPPLIES					3	—		
	20	FREIGHT & EXPRESS OUTWARD					12	—	26	60
	17	TRAVELING EXPENSES-TATTERSAL					57	65	57	65
21	15	SALARIES-STOCK CLERK					12	—	12	—
	21	ALBERT BROWN DRAWING ACCT.-PERSONAL					50	—	50	—
23	1	CAREY-HART HAT MFG. CO.-BILL 9/11	1400	—	42	—			1358	—
25	17	TRAVELING EXPENSES-TATTERSAL					66	10	66	10
	18	GENERAL EXPENSES					29	45		
		CARFARES 2.60 — PETTY CASH BOOK PAGE 1								
		TELEGRAMS 1.85								
		POSTAGE 25.00								
	19	FREIGHT & EXPRESS INWARD					4	05		
	20	FREIGHT & EXPRESS OUTWARD					12	—	45	50
28	15	SALARIES-STOCK CLERK $12-BOOKKEEPER $25					37	—	37	—
	21	ALBERT BROWN DRAWING ACCT.					75	—	75	—
		CARRIED FORWARD	5423	00	223	15	1492	25	6692	10

C.4.

CASH PAID (CONTINUED)

SEPTEMBER, 19__

DATE	L.F.	PARTICULARS	CREDITORS' ACCOUNTS		CASH DISCOUNTS RECEIVED		GENERAL		NET CASH	
30		BROUGHT FORWARD	5423	00	223	15	1492	25	6692	10
	18	GENERAL EXPENSES								
		CAR FARES .90								
		TELEGRAMS 1.25								
		POSTAGE 9.—					11	15		
	20	FREIGHT & EXPRESS OUTWARD					4	30	15	45
	22	SALESMEN'S SALARIES —TATTERSAL					100	—	100	—
		FOR SEPT.								
			5423	00	223	15	1607	70	6807	55
		SUMMARY:								
30	5	CREDITORS' CONTR'L'G ACCT. $5423.00								
	POSTED	GENERAL 1607.70								
	28	CASH			$6807	55				
	30	CASH DISCOUNTS RECEIVED			223	15				

in the first and third columns, while the cash discount column indicates charges to the "cash discount allowed" account. The ultimate handling of the figures in these columns will be explained later. Since the $10,000 contributed by Mr. Brown came from a source other than customers' accounts, it must appear in the general column from which in turn it will be credited to Mr. Brown's account. The cash account is charged in the net cash column with the full $10,000 which actually was placed in the bank. In a business where all incoming cash is deposited, the net cash column, it may be said in passing, should agree with the amount deposited in the bank, which in this case let us say, is the First National.

The rent for the month of September, being paid in cash, causes a reduction of our asset cash and must therefore be entered on the paid side of the cash book. It is properly charged to a separate rent account and since it is not a payment of a creditor's account it must appear in the general column, as well as in the net cash column. This net cash column, by the way, must agree with the total of all the checks issued, since all payments, except petty cash payments (which will be explained later) are made by check.

We have next to record the purchase of the furniture. Since this was not a cash transaction, it must be entered either in the journal or in one of the subsidiaries—the purchase book. There probably will be enough other purchases to warrant opening a separate book for this purpose. For instance, we shall receive from time to time shipments of the various kinds of hats dealt in, and we shall want to know at the end of each period just how large our purchases of each kind have been. This information is easily obtained by providing a separate

1 **PURCHASES** 1

SEPTEMBER, 19___

DATE	L.F.	CREDITOR	MEN'S STIFF HATS	MEN'S SOFT FELTS	WOMEN'S FELT SHAPES	GENERAL	TOTAL
2	2 G 1	HERBERT DESK CO. (FURNITURE & FIX.)				930 —	930 —
4	1	CAREY-HART HAT MFG. CO.	1000 —				1000 —
	5	MOWBRAY HAT CO.		1800 —			1800 —
5	6	TAYLOR HAT CO.			1232 —		1232 —
6	3 G 16	JONES STATY CO. (PACKING MATERIALS)				6 —	6 —
	4 G 16	KEYSTONE BOX CO. (PACKING MATERIALS)				82 —	82 —
11	1	CAREY-HART HAT MFG. CO.	1400 —				1400 —
23	4 G 16	KEYSTONE BOX CO. (PACKING MATERIALS)				48 —	48 —
24	5	MOWBRAY HAT CO.		2600 —			2600 —
			2400 00	4400 00	1232 00	1066 00	9098 00
		SUMMARY:-					
30	10	MEN'S STIFF HATS $2400.00					
	11	MEN'S SOFT FELTS 4400.00					
	12	WOMEN'S FELT SHAPES 1232.00					
	POSTED	GENERAL 1066.00					
	5	CREDITORS' CONTROLLING ACCT.	$9098.00				

column for each. At the same time we shall save considerable labor and time by withholding our postings of the hats purchased until the end of each month, at that time posting only the totals. Other purchases, for the time being, may be taken care of in the general column. Later, if we find that any one item appears very often in the general column, we may decide to open a separate column for that particular kind of purchase.

Furniture, then, will be entered in the general column, and since it is an increase in assets, will be charged to an asset account—furniture and fixtures. The Herbert Desk Company will be credited, because we have created a liability. The entry would then appear as illustrated on page 160.

No entry need be made to record the contract for carpenter work until payment is made and until the bill for the finished work comes in. The written contract or the correspondence relating to the matter will be sufficient record. In fact, since no property has changed hands the contract cannot be recognized as a bona fide transaction from an accounting point of view.

The amount paid for books and stationery reduces our cash supply and must for that reason be entered in the cash book on the paid side. For the present this stationery is an asset and will so remain until consumed. Moreover, it is advisable to keep separate account of stationery and supplies purchased and used. The entry on page 157 properly records this transaction. It is best for the present to pay no attention to columns with the heading "L. F." no matter where they may appear. The use of this column will be explained as we proceed.

135. *The fourth day's transactions.*—On September 4th, the first shipment of derbies came in from the Carey-Hart Hat Manufacturing Company of Orange,

New Jersey. The bill amounted to $1,000 and the terms were 3 per cent. 10 days; 30 days net. Later in the day a lot of men's soft felt hats from the Mowbray Hat Company, Newburgh, New York, arrived. The bill for the shipment called for $1,800 with terms 5 per cent ten days, 3 per cent thirty days and net sixty days. On the same day Mr. Brown mailed five thousand announcements to the trade, the total cost of which, including postage, was $174.50 and was paid in cash.

The receipt of the hats is, of course, entered in the purchase book (page 160), the Carey-Hart amount being entered in the men's stiff hats column and the Mowbray bill in the men's soft felts column; both amounts are carried into the total column, as is the case with all entries in the subsidiary books in which a total net column is employed.

The mailing of the announcements constitutes an advertising expense, and since there will probably be other advertising it might be well to open an account for outlays of this sort. The entry, then, appears on the "cash paid" side of the cash book in the general and net cash columns.

136. *The fifth day's transactions.*—Mr. Brown has been waiting for a lot of ladies' assorted felt hats, untrimmed—which we shall call felt shapes—before sending out a salesman with samples. These arrive on September 5th from the Taylor Hat Company of Philadelphia, amount of the bill being $1,232 with terms 5 per cent ten days, 3 per cent thirty days and 60 days net. W. H. Tattersall, an old business acquaintance of Mr. Brown's, has agreed to devote all his time to selling our hats on a combined salary and commission basis; the salary to be $100 a month and the commission 5 per cent of his own gross sales. Mr. Tattersall is immediately

given a lot of samples and $100 on account for expenses, with the understanding that he is to send in a weekly expense report, and that all sales are to be on the uniform terms of 2 per cent ten days, thirty days net.

The cabinetmaker who has been working on our shelves, partitions and tables has requested $100 on account to help meet his weekly payroll and a check for this amount is given him.

Some signs which were ordered several days ago have been delivered and put in place. A check for $45 was given to the sign man in payment.

The ladies' hats are to be entered in the purchase book in the manner of previous hat purchases, except that the amount is entered in the column set aside for ladies' felt shapes.

In order to keep track of the moneys advanced to Tattersall and, perhaps, to other salesmen later, it will be well to open a special account called "salesmen's expenses." Accordingly, the $100 given to Tattersall will be charged to this account on the paid side of the cash book.

We might charge the cabinetmaker with $100 and later credit him with the value of the work completed, but inasmuch as all this work is on a cash basis it will be satisfactory if we charge the $100 direct to furniture and fixtures in the cash book. The balance of these contracts, when paid, will be charged in the same way, thereby simplifying the situation.

As the money paid for signs constitutes an advertising expenditure, it is properly charged to the advertising account in the cash book.

137. *The sixth day's transactions.*—On September 6th a quantity of twine and wrapping paper is received from the Jones Stationery Company, with whom we

have arranged to pay our bills monthly. The price of this material is $6. From the Keystone Box Company is received, upon the the same credit terms, a quantity of crates and wooden cases. These two transactions offer no special problems, and are recorded in the purchase book. Since, however, these goods will be used for the purpose of wrapping and packing shipments, they may be classified as packing materials, in order that we may be able later to determine how much it cost us to pack our goods.

138. *The seventh day's transactions.*—On September 7th, a Saturday, the stock clerk's wages of $12 were paid. On the same day the cabinetmaker finished his work and was paid the remainder due upon his contract, the total of which is $350.

On this day our first order reaches us. Tattersall, the salesman, has begun work in Newark, New Jersey, and is sending an order from the Haney Company of that city for men's derbies, $60; and men's soft felts, $40.

The stock clerk's wages are, of course, entered in the cash book, but it will be well also to open a salaries' account, to which they and those of other clerks, who undoubtedly will be needed later, may be charged. The payment of $250 to the cabinetmaker is handled in exactly the same way on the books as the $100 payment was on the fifth day.

Now that we have begun to sell goods, we are confronted with the necessity of providing some means of recording them. We have already learned that sales are usually entered in a separate sales book which in reality is a form of journal. In order to keep separate the sales of the different kinds of hats in which we deal, it is advisable to open separate columns for each kind

1. 1.

ALBERT BROWN
SALES
SEPTEMBER, 19___

DATE	L.F.	CUSTOMER	MEN'S STIFF HATS		MEN'S SOFT FELTS		WOMEN'S FELT SHAPES		TOTAL	
7	8	HANEY & CO., NEWARK N. J.	60	—	40	—			100	—
9	12	LANDBERGER & CO. "	230	—					230	—
	2	THE CLARK STORES, N.Y.C.					85	—	85	—
	14	PLAUTENBERG & CO., NEWARK N. J.	300	—					300	—
	15	TURNER BROS., TRENTON N. J.	45	—	30	—			75	—
	9	THOS. HANNAWAKER,	350		300	—			650	—
		PHILA., PA.								
11	5	DRAWBRIDGE & COLER	175	—	270	—			445	—
		PHILA., PA.								
12	3	CARHART & MACKSEY			40	—			40	—
		READING PA.								
13	7	GOODMAN, COHEN & CO.	120	—					120	—
		PITTSBURG, PA.								
18	6	FORMAN DRY GOODS CO.	120	—	180	—			300	—
		CINCINNATI, O.								
	16	TATE & TOWN, CIN. O.			70	—			70	—
21	10	A. KALTENBLATT, N.Y.C.					30	—	30	—
23	11	KELLY & McGOVERN,	200	—	120	—			320	—
		INDIANAPOLIS, IND.								
25	17	TUMPELLY HAT CO.	150	—	200	—			350	—
		ST·LOUIS								
	1	APPELBAUM D. G. CO.					100	—	100	—
		ST·LOUIS								
	18	UNION D. G. CO.	85	—	150	—	30	—	265	—
		ST·LOUIS								
26	4	CARTER, PIERSON & MOTT	650	00	940	00			1590	—
		CHICAGO								
27	13	LARSON, WEIL & CO. CHICAGO	400	00	600	—			1000	—
			2885	00	2940	00	245	00	6070	00
		SUMMARY:								
30	2	CUSTOMERS' CONTROLLING ACCOUNT $6070.00								
	23	MENS'S STIFF HAT SALES 2885.00								
	24	MENS'S SOFT FELT SALES 2940.00								
	27	WOMEN'S FELT SHAPE SALES 245.00								

PETTY CASH

SEPTEMBER, 19___ 1

Received Folio	Received Date	Received Amount	Explanation	Date	Folio	Car Fares	Telegrams	Office Supplies	Freight & Express, In	Freight & Express, Out	Postage	General	Total
C 2	3	50 00	SUNDRY ERRANDS	3		30							30
			TELEGRAM FROM TATTERSAL .40, CARFARES .20,	4		20	40				3 00		3 60
			POSTAGE 3.00										
			FREIGHT AND CARTAGE ON CAREY-HART	4					7 50				7 50
			SHIPT. $2.80-MOWBRAY 4.70										
			CARFARES .50-TELEGRAM TATTERSAL .50	5		50	50						1 00
			TELEGRAM TATTERSAL-1.10 CARFARES .45	6		40	1 10						1 50
			EXP.-HANEY	7						35			35
			CARFARES			40							40
			EXP. LANDBERGER .45	9									
			" PLAUTENBERG .55										
			" TURNER .35										
			" HANNAWAKER 1.50							2 85			2 85
			WIRE FROM TATTERSAL .60, REPLY .60	10			1 20						1 20
			EXP. ON SUPPLIES AND SAMPLES TO TATTERSAL							2 00			2 00
			CARFARES			20							20
			EXP.-DRAWBRIDGE	11						70			70
			CARFARES			20							20
			EXP.-CARHART, CARFARE .10			10				60			70
			POSTAGE								12 00		12 00
						2 30	3 20		7 50	6 50	15 00		34 50
			BALANCE										15 50
	12	15 50	BALANCE										50 00
C 2	12	34 50											

as provided for in the purchase book. The form on page 165 answers this purpose. We record the Haney sale by entering the $60 in the column for men's stiff hats, and $40 in the column for men's soft felts, and place the total in the total column.

139. *Transactions of September 9th.*—On the following Monday, Tattersall sold a $230 order for men's stiff hats to Landberger and Company, Newark, New Jersey. The Clark Stores of New York City ordered a lot of ladies' felt shapes, amounting to $85. By the afternoon mail the following orders came in from our salesman and were filled:

Plautenberg & Company, Newark, N. J.—men's derbies	$300.00
Turner Brothers, Trenton, N. J.—men's derbies	45.00
" felts	30.00
Thomas Hannawaker, Philadelphia, Pa.—men's derbies	350.00
" felts	300.00

These transactions are entered in the sales book, as illustrated in the Haney case, and present no difficulty. We must take care, however, that the amounts are entered in the proper columns.

140. *September 10th.*—It has been decided to start a "petty cash" fund of $50. Up to the present, various small sums have been paid out of Mr. Brown's pocket. He has kept a memorandum record of them, however, and is now reimbursed from the petty cash fund. The entries are made in the petty cash book as if they had been recorded when they took place.

One of the simplest ways of handling the petty cash expenditures is to draw and cash a check for, say, $50 and keep this amount constantly in the petty cash. When this sum is nearly spent, a check for the amount spent is drawn, and the fund thus replenished. It is

best to keep a petty cash book in which the expenditures of various kinds are so classified that they may be easily collected according to the various accounts to which they belong. The form on page 166 shows the amounts received from time to time and indicates the method of entering the detailed expenditures as they occur. Only the transactions included up to the first settling date are illustrated, but these are sufficient to demonstrate the operation and the method of balancing.

Since the amount was taken from the general fund it must be entered in the cash book. Here it is charged to a petty cash account, which is a constant asset, not being changed until the fund is either increased or decreased permanently.

141. *September 11th.*—Tattersall sends an order from Drawbridge and Coler, Philadelphia, for men's derbies, $175, and men's soft felts, $270. On the same day we receive from Carey-Hart Hat Manufacturing Company, a new lot of men's stiff hats invoiced at $1,400.

The method of recording these transactions has already been illustrated: the sale is entered in the sales book and the lot of hats in the purchase book.

142. *September 12th.*—Tattersall sends in his first expense account which shows that he has used $61.40 of the $100 advanced him; a check is sent to him for $61.40 to replenish his expense account. We now find that our petty cash fund has been reduced to $15.50, and that the expenditures are as follows:

Carfares	$2.30
Telegrams	3.20
Postage	15.00
Express and freight, inward	7.50
Express and freight, outward	6.50
Total	$34.50

In the afternoon an order from Carhart and Mack-sey, Reading, Pa., for men's soft felts, $40, is received and filled.

We charge Tattersall's expenses direct to a salesmen's expense account so that we shall be able to determine how much it costs us in traveling expenses to sell our goods. If no check had been sent to the salesman, the entry would be made in the journal. Since it has, we record the transactions in the cash book as usual.

The petty cash expenditures are lumped in one sum in the net column on the paid side of the cash book, but are charged to various accounts. Carfares, telegrams and postage are general expenses and, until they are more numerous, may properly be charged to a general expense account. Express and freight inward should be separated from express and freight outward, because the former are virtually an addition to the price paid for the merchandise purchased, and must eventually be added to the purchase prices. Express and freight outward are reductions from our selling prices.

The Carhart sale is entered in the sales book as usual.

143. *September 13th.*—Filled an order from Goodman, Cohen & Company, Pittsburgh, Pa., for men's derbies, $120.

Thomas Hannawaker returns a dozen felt hats which he claims are defective. The claim is allowed and the hats in turn are returned to Mowbray, from whom they were purchased by us. The sales price of this particular dozen was $15; the cost to us $9.

The sale is recorded in the sales book in the usual manner; Hannawaker's return, however, is entered in the journal since no separate return book is kept. Here the men's soft felt sales account, which, for reasons which will appear later is separated from men's soft

ALBERT BROWN—JOURNAL

SEPTEMBER, 19—

1.

FOLIO	PARTICULARS	DEBITS		CREDITS	
	—1—				
	ENTERED WHOLESALE HAT BUSINESS TO-DAY WITH COST CAPITAL OF $10,000 LEASED OFFICE AND SALESROOM AT 900 BROADWAY, NEW YORK CITY FOR ONE YEAR AT AN ANNUAL RENTAL OF $1500				
	—13—				
24	MEN'S SOFT FELT SALES	15	—		
Cr. L. 9	THOMAS HANNAWAKER (CUSTOMER'S CONTROLLING ACCT.)			15	—
2	RETURNED ONE DOZEN SOFT FELT HATS STYLE NO. 106 WHICH WERE DEFECTIVE				
	—13—				
Cr. L. 5	MOWBRAY HAT CO. (CREDITOR'S CONTROLLING ACCT.)	9	—		
5					
11	MEN'S SOFT FELT HATS			9	—
	RETURNED ABOVE DOZEN NO. 106 SOFT FELT HATS TO MOWBRAY				
	—30—				
17	TRAVELING EXPENSES	37	28		
4	SALESMAN'S ADVANCES			37	28
	ACCRUED TRAVELING EXPENSES FOR WHICH PAYMENT HAS NOT BEEN SENT TO TATTERSAL				
	—30—				
25	MANAGERIAL SALARIES	500	—		
21	ALBERT BROWN DRAWING ACCOUNT			500	—
	SALARY FOR SEPTEMBER				
	—30—				
26	SALESMEN'S COMMISSION	297	75		
7	W. H. TATTERSAL			297	75
	TATTERSAL'S COMMISSION FOR SEPT. 5% OF $5955				
	—30—				
31	INTEREST LOST	7	50		
32	INTEREST ACCRUED			7	50
	FIFTEEN DAYS INTEREST ON NOTE TO H. C. MARKS FOR $3000-ACCRUED BUT NOT DUE				

2.

JOURNAL— (CONTINUED)

SEPTEMBER, 19—

FOLIO	PARTICULARS	DEBITS		CREDITS	
	—30—				
33	INVENTORIES	4901	30		
10	MEN'S STIFF HATS			842	00
11	MEN'S SOFT FELTS			2910	00
12	WOMEN'S FELT SHAPES			1057	00
16	PACKING MATERIALS			64	30
9	STATIONERY AND SUPPLIES			28	00
	TO PLACE ON THE LEDGER AS ASSETS THE INVENTORIES OF MERCHANDISE AND SUPPLIES ON HAND				
	—30—				
23	MEN'S STIFF HAT SALES	2885	00		
24	MEN'S SOFT FELTS SALES	2925	00		
27	WOMEN'S FELT SHAPES SALES	245	00		
35	TRADING ACCOUNT			6055	00
	TO CLOSE INTO TRADING ALL THE ACCOUNTS ENUMERATED ABOVE				
	—30—				
35	TRADING ACCOUNT	4171	73		
10	MEN'S STIFF HATS			1558	00
11	MEN'S SOFT FELTS			1481	00
12	WOMEN'S FELT SHAPES			175	00
19	FREIGHT AND EXPRESS INWARD			11	55
14	ADVERTISING EXPENSE			219	50
16	PACKING MATERIALS			71	70
20	FREIGHT AND EXPRESS OUTWARD			34	80
17	TRAVELING EXPENSES			222	43
22	SALESMEN'S SALARIES			100	00
26	SALESMEN'S COMMISSION			297	75
	TO CLOSE INTO TRADING ALL THE ACCOUNTS ENUMERATED ABOVE				
	—30—				
35	TRADING ACCOUNT	1883	27		
36	PROFIT AND LOSS ACCOUNT			1883	27
	CLOSING OUT THE FORMER ACCOUNT BY TRANSFERRING BALANCE TO THE LATTER				

JOURNAL

3.

SEPTEMBER. 19__

FOLIO	PARTICULARS	DEBITS		CREDITS	
	—30—				
30	CASH DISCOUNT GAINED	223	15		
36	PROFIT AND LOSS ACCOUNT			223	15
	TO CLOSE THE FIRST MENTIONED ACCOUNT				
	—30—				
36	PROFIT AND LOSS ACCOUNT	856	80		
25	MANAGERIAL SALARIES			500	00
15	SALARIES			73	00
13	RENT			125	00
18	GENERAL EXPENSES			72	70
9	STATIONERY AND SUPPLIES			33	00
29	CASH DISCOUNTS LOST			45	60
31	INTEREST LOST			7	50
	TO CLOSE INTO PROFIT AND LOSS ACCOUNT				
	ALL THE ABOVE ENUMERATED ACCOUNTS				
	—30—				
36	PROFIT AND LOSS ACCOUNT	30	27		
34	RESERVE FOR BAD DEBTS			30	27
	TO SET ASIDE $\frac{1}{2}$% OF SALES FOR SEPTEMBER, 19—				
	AS A RESERVE AGAINST UNCOLLECTIBLE ACCOUNTS				
	—30—				
36	PROFIT AND LOSS ACCOUNT	1219	35		
21	ALBERT BROWN DRAWING ACCOUNT			1219	35
	TO TRANSFER THE NET PROFIT FOR SEPTEMBER,				
	19—TO ALBERT BROWN'S CREDIT				
	—30—				
	ALBERT BROWN DRAWING ACCOUNT	1494	35		
	ALBERT BROWN CAPITAL ACCOUNT			1494	35
	TO CREDIT ALBERT BROWN WITH THE				
	ADDITION TO HIS CAPITAL INVESTMENT				

felts purchases, is charged with the amount, and Hannawaker's account is credited. At the end of the month the customers' controlling account in the general ledger is also credited.

The return of the hats to Mowbray is handled in just the reverse order. Men's soft felts (the purchase account) is credited, while Mowbray's account and creditors' controlling account are both charged.

144. *September 14th.*—The Carey-Hart Hat Manufacturing Company's bill of September 1st is due today. After deducting the discount a check for $970 in payment of the bill is sent.

Today being Saturday, the stock clerk's wages of $12 are paid. Mr. Brown also draws $100 for his personal expenses.

The payment to Carey-Hart is the first transaction of this nature that we have had. The full amount, $1,000, is entered in the creditors' accounts column; the discount is entered in the discount column, and the net amount in the net cash column. Carey's account is now credited with $1,000. Unless this account were charged with the full amount of the bill, it would show a balance due of $30, which is incorrect. This would make it necessary to place an entry in the journal, charging Carey's account and crediting a cash discount account. Instead of this round-about way the transaction is taken care of by one entry in the manner described. At the end of the month the creditors' controlling account in the general ledger is charged with all the payments (without deducting discounts) so that these payments taken collectively will agree with the amount charged to the creditors' accounts individually in the subsidiary ledger. The total of the discount column is thereupon credited (not charged) to an account called "cash discount gained."

The record for the payment of the stock clerk's wages has already been explained.

It is necessary to keep a separate account of the various amounts drawn from the business by Mr. Brown, and the amounts credited to him for salary and profits. This account is usually called a drawing account; hence the entry illustrated on the paid side of the cash book.

145. *September 15th.*—Today we borrowed $3,000 from H. C. Marks on our note, and paid the Mowbray and Taylor bills dated September 4th, deducting the 5 per cent discount in each case. The Marks loan produced an increase in both our cash account and in our liabilities, for we now owe Marks on our note. Since this is a purely cash transaction, and since a cash book has been provided for cash receipts and payments, the note may properly be entered on the receipt side of the cash book in the general column. It is customary to keep a notes payable account, since the note might finally become payable to some other party. These notes, which are commonly called commercial paper, pass from hand to hand by endorsement, as explained in the volumes on "Banking" and "Commercial Law."

Ordinarily, notes paid to creditors in settlement of accounts, or received from customers in settlement of accounts, are entered in the journal, because, as a rule, no special book is provided for them. In cases where such notes are numerous, separate notes receivable and notes payable books, are maintained. These books are operated in a manner similar to that adopted for the sales and purchase books; in other words, they are subsidiaries of the journal. They permit much saving in time and labor since the notes receivable accounts and notes payable accounts may be charged or credited, as the case may be, with totals instead of with separate items.

A payment to the Mowbray Hat Company and one to the Taylor Hat Company are entered on the paid side of the cash book in the usual manner.

146. *September 18th.*—Tattersall sends us an order from the Forman Dry Goods Company, Cincinnati, Ohio, for men's stiff hats $120, and men's felts $180; also an order from Tate & Town, of the same city, for men's soft felts $70.

Our petty cash fund again needs replenishing. The expenditures were $26.60 and for the following items:

Carfares	$1.60
Postage	10.00
Office supplies	3.00
Express and freight, outward.............	12.00
Total	$26.60

Tattersall's expense account for $57.65 came in, and a check for that amount was sent him.

The sales are entered in the sales book as usual; the petty cash check is entered on the paid side of the petty cash book, the carfares and postage are charged to general expense, the office supplies to stationery and supplies account, and expressage outward to the freight and express outward account. The salesmen's expense account is charged with the check sent Tattersall.

147. *September 19th.*—Haney and Company paid by check for the shipment of September 7th, deducting $2 for cash discount. This check is of course entered in the cash book on the received side. We must, however, credit Haney with the full amount of the bill, charge "discounts allowed" with the discount, and charge cash with the net amount. The two charges com-

bined offset the credit, and keep our books in balance. The entry shown on page 156 is self-explanatory.

148. *September 20th.*—The following payments from customers come in:

Landberger & Company, in payment of bill of September 9th	$225.40
The Clark Stores, in payment of bill of September 9th.	83.30
Plautenberg & Company, in payment of bill of September 9th	294.00
Turner Brothers, in payment of bill of September 9th.	73.50

Thos. Hannawaker also sends his check in payment of the bill of September 9th, after deducting the discount and the returned goods. The net amount of the check is $622.30.

As has just been explained, these cash receipts are entered in the cash book on the received side.

149. *September 21st.*—Stock clerk's wages of $12 were paid and Mr. Brown drew $50 on account.

A. Koltenblatt, of New York City, sent in for some ladies' felt shapes, the order amounting to $30.

Since we have had similar transactions before, no explanation of the entries is necessary.

150. *September 22d.*—Drawbridge & Coler sent their check for the September 11th bill; the net amount of which was $436.10.

We paid the Carey-Hart Hat Manufacturing Company for the September 11th shipment. The net amount was $1,358.

The Keystone Box Company delivered to us another lot of crates and cases, amounting to $48.

Tattersall sends in an order from Kelly & McGovern, Indianapolis, for men's derbies $200 and men's soft felts $120.

The Drawbridge check is entered on the received side of the cash book, and the Cary-Hart check on the paid side.

The crates and cases from the Keystone Company are recorded in the purchase book as before. The Kelly & McGovern sale is handled like the other sales.

151. *September 24th.*—Carhart & Macksey, of Reading, Pa., send their check for $39.20 in payment of the September 12th bill.

Another lot of soft felts arrives from the Mowbray Hat Company. The amount of the purchase is $2,-600.

152. *September 25th.*—An order from the Trumpelly Hat Company, St. Louis, Mo., for men's derbies $150 and men's soft felts $200 is filled. The following additional sales are also made:

Appelbaum Dry Goods Company, St. Louis, Mo., ladies' felt shapes $100. Union Dry Goods Company, St. Louis, Mo., men's stiff hats $85; men's soft felts $150 and ladies' felt shapes $30.

A check for $66.10 is sent to Tattersall in payment of his expense account.

The petty cash fund is replenished with $45.50 for the following expenditures:

Carfare	$2.60
Telegrams	1.85
Postage	25.00
Freight and express, inward	4.05
Freight and express, outward	12.00

There is nothing new about any of these transactions. The reader is referred to the entries of similar cases previously given.

153. *September 26th.*—A sale is made to Carter, Pierson & Mott, Chicago, Ill., of men's derbies $650 and men's soft felts $940. The sale is duly entered in the sales books.

154. *September 27th.*—An order from Larson, Weil & Company, Chicago, Ill., for men's derbies $400 and men's soft felts $600, is filled and recorded.

155. *September 28th.*—The stock clerk's wages are paid, also $25.00 salary to a bookkeeper who has been employed during the week. Mr. Brown drew $75 on his personal account.

All these payments are entered in the cash book in the manner already explained.

156. *September 30th.*—The Forman Dry Goods Company sent their check for $294 in payment of the September 18th bill; Tate & Town likewise send a payment of $68.60. We have asked Tattersall to wire us the amount of his expenses to date, in order that we may apply the proper amount to this month's business. His reply shows $37.28 spent which is temporarily credited to salesman's advances in the journal.

Mr. Brown decides to pay himself a monthly salary of $500 and is accordingly to be credited with that amount each month.

In order that we may include the petty cash expenses up to the end of the month, the petty cash fund is balanced and a check for $15.45 is drawn to cover the following expenses:

Carfares	$0.90
Telegrams	1.25
Postage	9.00
Freight and express, outward	4.30
Total	$15.45

Tattersall notifies us that he wishes to have his salary check sent him, and his commission to be credited to his personal account.

The interest accrued but not yet due on the Marks note is $7.50. That is for fifteen days at 6 per cent.

The checks from the Forman and the Tate and Town concerns are entered in the cash book in the regular way.

Mr. Brown's reason for wanting a monthly salary is that he may be able to determine accurately his profits. He realizes that he could earn a salary of $500 a month as an employé of some other business and that he cannot rightly consider that profits have been earned until after the business has paid him a salary at least equal to that which he could earn elsewhere. In order to keep Mr. Brown's salary and that of any other executive who may be employed later, separate from the ordinary clerical salaries, it is advisable to open an account to be called "managerial salaries." This account must therefore be charged with $500 and Mr. Brown's drawing account credited with same amount. Since there are no special books available for the purpose the entry will appear in the journal.

The petty cash check is entered in the cash book, as is also Tattersall's salary check. The latter is charged to a separate account called salesmen's salaries.

The commissions for the month must now be entered in the journal. It will be necessary for us to determine first what these commissions are. By referring to the sales book and adding the total column we find that the total sales for the month were $6,070. In two of these sales, however, Tattersall did not participate—namely, the New York sales to the Clark Stores and to A. Koltenblatt, amounting in all to $115. Deducting this amount from the total sales we have $5,955 as the total

of Tattersall's sales. According to the agreement entered into with him Tattersall is entitled to 5 per cent, a commission of $297.75. The procedure is therefore to start a salesmen's commission account and to credit Tattersall in the journal.

The interest accrued to date on the Marks note is as much a liability as any other on our books. Moreover, the current period should bear that portion of the total interest which has already been consumed. Interest, of course, accumulates from day to day, although in practice it is not so calculated. The proper proceeding is to charge interest lost or interest—the title of the account is of no particular moment—and to credit an account called interest accrued. The one is an expense account and the other a liability account. The entry necessarily appears in the journal.

CHAPTER XIII

CLOSING ENTRIES

157. *Posting.*—All the routine transactions during the month have now been entered in the books of chronological record. In practice, those entries which are charged to individual accounts, are posted—that is, transferred—shortly after the transactions take place. In business the rule is that posting must be complete each day. In order not to confuse the reader, this part of the work has been deferred until the present.

Let us take the purchase book first. It is evident that it will be advisable to open a creditors' ledger in which each concern from whom we purchase on credit may have a separate account. Frequently these ledgers are in loose leaf form, filed alphabetically. Most loose leaf ledgers are of the three column kind, the first column being used for the debit, the second for credits and the third for balances, as illustrated on page 182.

The first entry in the purchase book is the purchase from the Herbert Desk Company of furniture and fixtures, amounting to $930. The Herbert Desk Company must be credited in the creditors' ledger. Turning to the ledger under "H" we enter the date in the first column; the page of the purchase book, which in this case is "1" in the second column, preceded by the letter "P," the symbol for purchase book; and the amount of the purchase in the credit or second column. The present balance on that account is $930, which is entered in the last or balance column. To offset this credit

CUSTOMERS' LEDGER

1 APPELBAUM DRY GOODS CO.
19__ ST.LOUIS, MO.

Sep.25	S.1		100	00			100	00

2 THE CLARK STORES
39 ST.
19__ NEW YORK CITY

Sep.9	S.1.		85	00			85	00
20	C.1.				85	00	—	—

3 CARHART AND MACKSEY
19__ READING, PA.

Sep.12	S.1.		40	00			40	00
24	C.1.				40	00	—	—

4 CARTER, PIERSON & MOTT
CHICAGO, ILL.
19__

Sep.26	S.1.		1590	00			1590	00

5 DRAWBRIDGE AND COLER
19__ PHILADELPHIA, PA.

Sep.11	S.1.		445	00			445	00
23	C.1.				445	00	—	—

6 FORMAN DRY GOODS CO.
19__ CINCINNATI, O.

Sep.18	S.1.		300	00			300	00
30	C.1.				300	00	—	—

7 GOODMAN, COHEN & CO.
19__ PITTSBURGH, PA.

Sep.13	S.1.		120	00			120	00

8 HANEY & CO.
NEWARK, N.J.
19__

Sep.7	S.1.		100	00			100	00
19	C.1.				100	00	—	—

9 THOMAS HANNAWAKER
19__ PHILADELPHIA, PA.

Sep.9	S.1.		650	00			650	00
20	C.1.				635	00	15	00
13	J.1.				15	00	—	—

10 A. KOLTENBLATT
BROADWAY
19__ NEW YORK CITY

Sep.21	S.1.		30	00			30	00

11 KELLY AND Mc GOVERN
19__ INDIANAPOLIS, IND.

Sep.23	S.1.		320	00			320	00

12 LANDBERGER & CO.
19__ NEWARK, N.J.

Sep.9	S.1.		230	00			230	00
20	C.1.				230	00	—	—

CUSTOMERS' LEDGER (CONTINUED)

13

LARSEN, WEIL & CO.
CHICAGO, ILL.

19__								
Sep.27	S.1.		1000	00			1000	00

14

PLAUTENBERG & CO.
NEWARK, N.J.

19__								
Sep.9	S.1.		300	00			300	00
20	C.1.				300	00	—	—

15

TURNER BROS.
TRENTON, N.J.

19__								
Sep.9	S.1.		75	00			75	00
20	C.1.				75	00	—	—

16

TATE & TOWN
CINCINNATI O.

19__								
Sep.18	S.1.		70	00			70	00
30	C.1.				70	00	—	—

17

TUMPELLY HAT CO.
ST.LOUIS, MO.

19__								
Sep.25	S.1.		350	00			350	00

18

UNION DRY GOODS CO.
ST.LOUIS, MO.

19__								
Sep.25	S.1.		265	00			265	00

CREDITORS' LEDGER

1

CAREY-HART HAT MFG. CO.
ORANGE, N.J.

19__								
Sep.4	P.1.				1000	00	1000	00
11	P.1.				1400	00	2400	00
14	C.2.		1000	00			1400	00
23	C.2.		1400	00			—	—

2

HERBERT DECK CO.
NEW YORK CITY

19__								
Sep.2	P.1.				930	00	930	00

3

JONES STATIONERY CO.
NEW YORK CITY

19__								
Sep.6	P.1.				6	00	6	00

4

KEYSTONE BOX CO.
NEW YORK CITY

19__								
Sep.6	P.1.				82	00	82	00
23	P.1.				48	00	130	00

5

MOWBRAY HAT CO.
NEWBURGH, N.Y.

19__								
Sep.4	P.1.				1800	00	1800	00
24	P.1.				2600	00	4400	00
15	C.2.		1791	00			2609	00
13	J.1.		9	00			2600	00

6

TAYLOR HAT CO.
PHILADELPHIA, PA.

19__								
Sep.5	P.1.				1232	00	1232	00
15	C.2.		1232	00			—	—

another account must be charged—in this case furniture and fixtures account. We have no separate column for furniture and fixtures in which a monthly total is obtained, hence the account in the general ledger must be charged individually, as shown on page 186.

The next item is the purchase from the Carey-Hart Hat Manufacturing Company. Turning to the Carey-Hart account in the creditors' ledger under "C" we find that the company is credited with one thousand dollars. The offset account, "men's stiff hats," need not now be charged in the general ledger, since there is a special column for men's stiff hats. At the end of the month we shall post the total of this column at one time; thereby avoiding frequent postings during the month.

The same procedure obtains in the case of the Mowbray Hat Company and in that of the Taylor Hat Company, as well as in the two other purchases that were made later.

The packing materials purchased from the Jones Stationery Company on September 6th are credited to the Jones Stationery Company's account in the creditors' ledger and charged to the packing materials' account in the general ledger. The same is true of the Keystone Box Company purchases.

Now that we have posted all these separate items (and it should be understood that in actual practice this posting is done from day to day), we are ready to make the final posting. Our first step is to add each column and determine whether the combined totals of what are known as the distribution columns—that is, in this case, the first four columns—equal the total of the last column. The next step is to charge in the general ledger those purchases which have not already been charged individually. In our case there are three separate classes

of purchases—men's stiff hats, men's soft felts and women's shapes, the total purchases of which are respectively $2,400, $4,400, and $1,232. In order to place the matter in record form, it is advisable to make a summary such as is shown on page 160. This indicates what accounts are to be charged in the general ledger and what accounts credited. We have already charged those accounts which are indicated in the general column, so that it will not be necessary to make the postings now.

The purchase of hats of three different kinds must now be charged to the proper accounts in the ledger. In order to maintain the balance in the general ledger, and in order that the credit side of the controlling account may agree with the creditors' individual accounts, the total purchases are credited in the general ledger to the creditors' controlling account.

158. *Posting sales book.*—The sales book is closed in a similar manner, except that the entries are reversed. We have seen that accounts are maintained in the general ledger for various kinds of hat purchases, and that to offset these purchases, separate accounts are also established for the purpose of recording the sales of each kind of hats. These sales accounts, as we know, are credited, while the purchase accounts are charged or debited. If all the hats purchased were sold, the difference between the two accounts would indicate the gross profit.

Instead of crediting the sales accounts as each sale is made, the various sales are grouped in proper columns, and the sales accounts are credited with the total amounts at the end of the month.

The customer who purchases the goods, however, is charged immediately with the sale, so that we may turn to his account at any time and learn how much he owes us. How the cash payments are similarly credited, we

1

FURNITURE AND FIXTURES

19__					19__				
Sept.5		C.2.	100	00					
7		C.2.	250	00					
2		P.1.	930	00					

2

CUSTOMERS' CONTROLLING ACCOUNT

19__					19__				
Sept.30		S.1.	6070	00	Sep.13		J.1.	15	00
					30		C.1.	2280	00
						BALANCE		3775	00
			6070	00				6070	00

3

PETTY CASH

19__					19__				
Sept.10		C.2.	50	00					

4

SALESMEN'S ADVANCES

19__					19__				
Sept.5		C.2.	100	00	Sep.30		J.1.	37	28

5

CREDITORS' CONTROLLING ACCOUNT

19__					19__				
Sept.13		J.1.	9	00	Sep.30		P.1.	9098	00
30		C.4.	5423	00					
30	BALANCE		3666	00					
			9098	00				9098	00

6

NOTES PAYABLE

19__					19__				
					Sep.15		C.1.	3000	00

shall see presently. These charges to the individual customers' accounts are made in the customers' ledger, while the credits to the sales account are made in the general ledger. To offset the sales account, and at the same time place upon the general ledger the asset represented by the amount due us for goods sold, it is necessary to charge some controlling account with the sale. For that reason, the total sales made on credit during the month are charged to what is known as the customers' controlling account. As has already been explained, the total charges and the total credits to this customers' controlling account should equal the total charges and total credits to the individual accounts in the customers' ledger, so that the balance of the customers' controlling account will be an accurate statement of the total amount due the business from its customers.

With this explanation we are now ready to close the sales book. Our first step is to find the totals of each column, and our second to record in memorandum form at the foot of the page, an entry that will authorize us to transfer the various amounts to the proper accounts in the general ledger. The summary entry on page 165 is illustrative. Finally, the actual posting is made; the customers' controlling account is charged with the total sales, while the various sales accounts are credited with the sales of each kind of hats. The figures in the folio column indicate the pages of the ledger upon which the postings will be found.

159. *Closing the cash book.*—The cash book does not differ in principle from the purchase and sales book. On the received side all the accounts have been credited individually with the amounts they paid into our treasury. The general accounts which appear in the general column, have been credited on the general ledger, and the

customers' accounts have been credited in the customers' ledger.

Here, however, we find a new item in the discount column. While the customer has deducted a cash discount in each case, his account has been credited with the full amount of the bill. In order that the total credit in the customers' controlling account may be equal to the total credit in the individual account in the customers' ledger, it is necessary to credit the customers' controlling account with the full amount of the bill, regardless of discounts deducted. To offset the deduction another account, cash discount lost, is debited for the discount deducted. The reason for this procedure will be clear if we remember that only the net increase is charged to cash, while the gross amount is credited to the customers' controlling account. The difference represented by the discount which is charged to cash discount lost and added to the net amount charged to the cash account will equal the gross amount credited to the customers' controlling account, thus maintaining the necessary balance, and at the same time indicating the amount of loss due to discounts allowed to customers.

Sometimes a cash account is maintained in the general ledger and sometimes the balance is kept in the cash book proper. In the latter case the cash book serves the dual purpose of a book of chronological record and a ledger account. In this case we have elected to operate a ledger cash account, thus keeping all the general ledger accounts within the covers of one book.

After finding the totals on the cash received side, we next charge cash with the net amount received and charge cash discount lost with the total amount of discount deducted. The first charge, therefore, represents an increase in assets, and the second a decrease in net

wealth. Our next step is to credit the customers' controlling account with the total of the credits to each account in the customers' ledger. We have already credited the accounts in the general column individual, and need not, therefore, now consider them further. The summary entry at the foot of the cash received side, as shown on page 156 satisfactorily explains the closing of the cash received side.

On the other side of the cash book, the conditions are similar though reverse. Here the creditors' controlling account in the general ledger is charged with the gross payments (discounts added), while the cash account is credited with the net cash paid and cash discounts gained with the discounts deducted. The general accounts which appear in the general column have already been charged in the general ledger. In the light of what has already been said the reader will find little difficulty in understanding the entries for the cash paid side—especially if he will study the summary entry on page 158.

It should be clear that after the net cash received has been charged to the cash account in the ledger, and the net cash paid has been credited, the balance must agree with the actual amount of cash in our possession.

160. *Trial balance.*—Since all the transactions for the month have been posted to the debit and credit of the proper accounts in the three ledgers—the creditors', the customers' and the general ledgers—the time has now arrived for determining the relative correctness of our work. To be absolutely certain that each account is properly charged and credited with the entries belonging to it, we should have to check over all the work from beginning to end. This, however, is not usually necessary. Frequently, certified public accountants are called in to audit and verify the accuracy of the work. It is ne-

cessary, however, to be as certain as we can that the mathematical phases of the work are correct before we proceed to determine what profit has been made. An apparently insignificant error might seriously affect the final calculations.

The first step is to prepare what is known as a trial balance of the subsidiary ledgers—the customers' and creditors' ledgers. In reality the term, "trial balance" as applied to this operation, is a misnomer unless controlling accounts are also maintained in the subsidiary ledgers. This sometimes is done although it is not the general rule. In any event, these trial balances are nothing more than lists of the balances remaining open upon the customers' and creditors' ledgers.

The bookkeeper begins with the first page of the ledger, turns over each leaf and writes down, one under the other, the name of each account open with the balance standing to the debit or credit. Obviously, in the customers' ledger these balances, with few exceptions, appear on the debit side, representing the amount owed to us by customers. The exceptions are the cases in which various customers have been credited with returns and other allowances after their accounts had been paid. In the creditors' ledger, the majority of the balances will be credits; here also there may be a few debit balances where returns or allowances were made after our check had been sent in settlement of the account.

When the detail of listing the balances has been completed, the totals are found. The net total of the balances in the customers' ledger—that is, after the credit balances have been deducted—should equal the debit balance in the customers' controlling account in the general ledger. Likewise the net total balances in the creditors' ledger should equal the balance in the creditors' controll-

ing account in the general ledger. If these balances agree, we are sure of one thing: that all the charges and credits in the subsidiary books of original entry, affecting customers and creditors, have actually been charged and credited. We are not sure, however, that they have been charged or credited to the correct accounts. Thus a charge to Carhart and Macksey might by mistake have been charged to Carter, Pierson and Mott without affecting the trial balance. Such error could be discovered only by examining again each individual entry, or it might be brought to our attention through a complaint from the customer when he is asked for payment a second time.

Having in a general way verified the accuracy of the balances in the controlling accounts, we are now ready to prepare a trial balance of the general ledger. The process is simple. The bookkeeper turns over each ledger page, beginning with the first, and lists the balances appearing in each open account. If the debit side is larger than the credit, there is a debit balance which we place in the left hand column of the trial balance (illustrated on page 192); if the credit side is larger, we have a credit balance, and place it in the right hand column. When all the balances have been listed and totalled, we shall find, if our work is correct, that the total debit balances equal the total credit balances. Here, again, we are assured that there has been a debit entry for every credit entry; for our books are in balance. But neither in this case have we assurance that the entries are made to the proper account; nor do we know but what entire business transactions have been omitted, or that errors of equal amounts have been made on debit and credit sides of the ledger or that a mathematical error in the original transactions was continued through

TRIAL BALANCE

SEPTEMBER 30, 19___

1	MEN'S STIFF HAT SALES			$2885	00
2	MEN'S SOFT FELT SALES			2925	00
3	WOMEN'S FELT SHAPE SALES			245	00
4	MEN'S STIFF HATS	$2400	00		
5	MEN'S SOFT FELT HATS	4391	00		
6	WOMEN'S FELT SHAPES	1232	00		
7	FREIGHT AND EXPRESS INWARD	11	55		
8	ADVERTISING EXPENSE	219	50		
9	PACKING MATERIALS	136	00		
10	FREIGHT AND EXPRESS OUTWARD	34	80		
11	TRAVELING EXPENSES	222	43		
12	SALESMEN'S SALARIES	100	00		
13	SALESMEN'S COMMISSION	297	75		
14	MANAGERIAL SALARIES	500	00		
15	SALARIES	73	00		
16	RENT	125	00		
17	GENERAL EXPENSES	72	70		
18	STATIONERY AND SUPPLIES	61	00		
19	CASH DISCOUNT GAINED			223	15
20	CASH DISCOUNTS LOST	45	60		
21	INTEREST LOST	7	50		
22	CASH	8426	85		
23	PETTY CASH	50	00		
24	CUSTOMERS' CONTROLLING ACCOUNT	3775	00		
25	SALESMEN'S ADVANCES	62	72		
26	FURNITURE AND FIXTURES	1280	00		
27	CREDITORS' CONTROLLING ACCOUNT			3666	00
28	NOTES PAYABLE			3000	00
29	W.H. TATTERSALL			297	75
30	INTEREST ACCRUED			7	50
31	ALBERT BROWN CAPITAL			10,000	00
32	ALBERT BROWN DRAWING ACCOUNT			275	00
		$23,524	40	$23,524	40

the books. Only detailed examination of each entry will establish the accuracy of individual postings.

In some cases, instead of listing the balances that appear upon the ledger, both the total debit and the total credit of each account is listed in the trial balance. To illustrate, let us take the customers' controlling account. By referring to the ledger we find that the total debit is $6,070 and the total credit $2,295. Instead of listing the balance, which is $3,775, we place the debit of $6,070 in the left-hand column and the credit of $2,295 in the right-hand column. It will be seen that this is just as effective a method of determining whether the ledger is in balance, as is the method previously described. The objection to this plan, however, is that it renders the trial balance useless for any other purpose.

The trial balance, as we have now prepared it, makes possible a preliminary estimate of the profit or loss for the period. In fact, the only information lacking is the amount of the inventories, which, in many cases, can be estimated or quickly determined, especially if a perpetual inventory record is kept. Proprietors are often anxious to learn the result of the period's transactions without waiting for the delay sometimes necessary in preparing the final official statement. Frequently, also, special information such as the amount of accounts outstanding, the advertising expense during the period, the salary pay roll, and the like, is desired, and such information can be obtained from the trial balance without waiting for the complete closing of the books.

161. *The inventories.*—We have already said that if all the goods purchased were sold, the difference between the amounts of purchases and sales would represent the gross receipts from which expenses would later be de-

ducted. But in practice this rarely happens. There are almost always some goods on hand which have not been sold. Obviously the sales should be offset only by the actual goods sold. In our case it is necessary only to determine how much is on hand, that is, to take an inventory, and to deduct the inventories from the amount purchased. At the end of the next succeeding month it will be necessary to add the present inventories to next month's purchases and to deduct the inventories at the close of the month.

We find that there are on hand the following:

Men's stiff hats	$842.00
Men's soft felts	2,910.00
Women's felt shapes	1,057.00
Packing materials	64.30
Stationery and supplies	28.00

These inventories are, of course, assets, and are entered at cost prices. They will appear among the assets in our final financial statement, and must for that reason be placed upon the general ledger. There are several methods of performing this operation. One is to open an inventory account and charge all the inventories to this account, while crediting the various purchase accounts. Another is to credit the purchase accounts on the one side and to recharge them on the other, thus confining the entry to the one account. We shall adopt the former method since it avoids mixing in our account transactions of an economic and of a specific nature.

It is wise for the sake of future reference to place a record of the transaction in a book of original entry—the journal. On page 171, therefore, we find the proper journal entry for recording the inventories upon the general ledger.

7

W.H. TATTERSALL

19__					19__				
					Sep.30		J.1.	297	75

8

ALBERT BROWN, CAPITAL

19__					19__				
					Sep.1		C.1.	10,000	00
					30		J.3.	1494	35

9

STATIONERY AND SUPPLIES

19__					19__				
Sept.3		C.2.	58	00	Sep.30	INVENTORY	J.2.	28	00
18		C.2.	3	00		PROFIT AND LOSS	J.3.	33	00
			61	00				61	00

10

MEN'S STIFF HATS

19__					19__				
Sept.30		P.1.	2400	00	Sep.30	INVENTORY	J.2.	842	00
						TRADING ACC'T	J.2.	1558	00
			2400	00				2400	00

11

MEN'S SOFT FELT HATS

19__					19__				
Sept.30		P.1.	4400	00	Sep.13		J.1.	9	00
					30	INVENTORY	J.2.	2910	00
						TRADING ACC'T	J.2.	1481	00
			4400	00				4400	00

12

WOMEN'S FELT SHAPES

19__					19__				
Sept.30		P.1.	1232	00	Sep.30	INVENTORY	J.2.	1057	00
						TRADING ACC'T	J.2.	175	00
			1232	00				1232	00

13

RENT

19__					19__				
Sept.1		C.2.	125	00	Sept.30	PROFIT AND LOSS	J.3.	125	00

14

ADVERTISING EXPENSE

19__					19__				
Sept.4		C.2.	174	50	Sept.30	TRADING ACC'T	J.2.	219	50
5		C.2.	45	00					
			219	50				219	50

15

SALARIES

19__					19__				
Sept.7		C.2.	12	00	Sept.30	PROFIT AND LOSS ACC'T	J.3.	73	00
14		C.2.	12	00					
21		C.2.	12	00					
28		C.2.	37	00					
			73	00				73	00

16

PACKING MATERIALS

19__					19__				
Sept.6		P.1.	6	00	Sept.30	INVENTORY	J.2.	64	30
6		P.1.	82	00		TRADING ACC'T	J.2.	71	70
23		P.1.	48	00					
			136	00				136	00

17

TRAVELING EXPENSES

19__					19__				
Sept.12		C.2.	61	40	Sept.30	TRADING ACC'T	J.2.	222	43
18		C.2.	57	65					
25		C.2.	66	10					
30		J.1.	37	28					
			222	43				222	43

18

GENERAL EXPENSES

19__					19__				
Sept.12		C.2.	20	50	Sept.30	PROFIT AND LOSS	J.3.	72	70
18		C.2.	11	60					
25		C.2.	29	45					
30		C.4.	11	15					
			72	70				72	70

19

EXPRESS AND FREIGHT INWARD

19__					19__				
Sept.12		C.2.	7	50	Sep.30	TRADING ACC'T.	J.2.	11	55
25		C.2.	4	05					
			11	55				11	55

20

EXPRESS AND FREIGHT OUTWARD

19__					19__				
Sept.12		C.2.	6	50	Sep.30	TRADING ACC'T.	J.2.	34	80
18		C.2.	12	00					
25		C.2.	12	00					
30		C.4.	4	30					
			34	80				34	80

21

ALBERT BROWN DRAWING

19__					19__				
Sept.14		C.2.	100	00	Sep.30		J.1.	500	00
21		C.2.	50	00	30		J.3.	1219	35
28		C.2.	75	00					
30		J.3.	1494	35					
			1719	35				1719	35

22

SALESMEN'S SALARIES

19__					19__				
Sept.30		C.4.	100	00	Sep.30	TRADING ACC'T.	J.2.	100	00

23

MEN'S STIFF HAT SALES

19__					19__				
Sept.30	TRADING ACC'T.	J.2.	2885	00	Sep.30		S.1.	2885	00

24

MEN'S SOFT FELT SALES

19__					19__				
Sept.13	TRADING ACC'T.	J.1.	15	00	Sep.30		S.1.	2940	00
30		J.2.	2925	00					
			2940	00				2940	00

25

MANAGERIAL SALARIES

19__					19__				
Sept.30		J.1.	500	00	Sep.30	PROFIT AND LOSS	J.3.	500	00

26

SALESMEN'S COMMISSION

19__					19__				
Sept.30		J.1.	297	75	Sep.30	TRADING ACC'T.	J.3.	297	75

27

WOMEN'S FELT SHAPE SALES

19__					19__				
Sept.30	TRADING ACC'T.	J.2.	245	00	Sep.30		S.1.	245	00

28

CASH

19__					19__				
Sept.30		C.1.	15234	40	Sep.30		C.4.	6807	55

29

CASH DISCOUNTS LOST

19__					19__				
Sept.30		C.1.	45	60	Sep.30	PROFIT AND LOSS ACC'T.	J.3.	45	60

30

CASH DISCOUNTS GAINED

19__					19__				
Sept.30	PROFIT AND LOSS ACC'T	J.3.	228	15	Sept.30		C 4.	228	15

31

INTEREST LOST

19__					19__				
Sept.30		J.1.	7	50	Sept.30	PROFIT AND LOSS ACC'T	J.3.	7	50

32

INTEREST ACCRUED

19__					19__				
					Sept.30		J.1.	7	50

33

INVENTORIES

19__					19__				
Sept.30	MEN'S STIFF HATS	J.3.	842	00	Sept.30	BALANCE		4901	30
	MEN'S SOFT FELTS	J.3.	2910	00					
	WOMEN'S FELT SHAPES	J.3.	1057	00					
	PACKING MATERIALS	J.3.	64	30					
	STATIONERY AND SUPPLIES	J.3.	28	00					
			4901	30				4901	30

34

RESERVE FOR BAD DEBTS

19__					19__				
					Sept.30	PROFIT AND LOSS	J.3.	30	27

35

TRADING ACCOUNT

19__					19__				
Sept.30	MEN'S STIFF HATS	J 3.	1558	00	Sept.30	MEN'S STIFF HAT SALES	J.3.	2885	00
	MEN'S SOFT FELTS	J.3.	1481	00		MEN'S SOFT FELT SALES	J.3.	2925	00
	WOMEN'S FELT SHAPES	J.3.	175	00		WOMEN'S FELT SHAPES SALES	J.3.	245	00
	FREIGHT & EXPRESS INWARD	J.3.	11	55					
	ADVERTISING EXPENSE	J.3.	219	50					
	PACKING MATERIALS	J.3.	71	70					
	FREIGHT & EXPRESS OUTW'D	J.3.	34	80					
	TRAVELING EXPENSES	J.3.	222	43					
	SALESMEN'S SALARIES	J.3.	100	00					
	SALESMEN'S COMMISSION	J.3.	297	75					
	PROFIT AND LOSS ACCOUNT	J.3.	1883	27					
			6055	00				6055	00

36

PROFIT AND LOSS ACCOUNT

19__					19__				
Sept.30	MANAGERIAL SALARIES	J.3.	500	00	Sept.30	TRADING	J.3.	1883	27
	SALARIES	J.3.	73	00	30	CASH DISC'TS GAINED	J.3.	223	15
	RENT	J.3.	125	00					
	GENERAL EXPENSES	J.3.	72	70					
	STATIONERY AND SUPPLIES	J.3.	33	00					
	CASH DISCOUNTS LOST	J.3.	45	60					
	INTEREST LOST	J.3.	7	50					
	RESERVE FOR BAD DEBTS	J.3.	30	27					
	ALBERT BROWN DRAWING ACCOUNT	J.3.	1219	35					
			2106	42				2106	42

162. *Trading account.*—We have now completed all the entries. So far as known, not a single transaction or condition of any kind has been left out. Accordingly, we are ready to proceed with the closing of the general ledger, to the end that we may determine the profit made or the loss sustained during the month.

The operations of our business fall into two classes—that of conducting the actual trading and that of administering the general business affairs. For that reason it will be advisable to establish two primary groups—one showing the net result of the trading and the other the net result after having deducted all administrative expenses. Accordingly, it is wise to open in the general ledger a trading account to which will be credited all sales representing the income from trading direct, and to which will be charged all the direct cost and expenses of trading. The actual operation will make this clearer than detailed explanation. We may, therefore, make in the journal an entry charging all the sales accounts, thus closing them by offsetting the credit to the same account, and credit the trading account just referred to. We may also record another entry, charging the trading account and crediting all the cost and expense accounts directly affected by trading. The entries in the journal on page 171, are self-explanatory.

The next step is to find out what, if any, is the profit due to direct trading. This, of course, is the excess of the total credit over the total debits. This excess indicates the amount left over for administrative expenses.

163. *Profit and loss account.*—We shall now close the trading account and open a profit and loss account; crediting the latter with the amount from which the administrative expenses and profits are to be deducted. This amount, as has just been explained, is the amount con-

tributed by the trading activities of the concern. On the journal, then, we enter a charge to trading account equal to the balance in that account, thus closing it, and a credit to profit and loss account, thus opening the latter.

Occasionally it occurs that profits arise from sources other than direct trading. In this case such a source is the profit derived from cash discounts, which we have deducted from creditors' bills. These cash discounts should, then, be credited to profit and loss account as an additional amount available for the payment of expenses and distribution of profits. The next journal entry is to charge the cash discount gained account with the amount standing to its credit, and to credit the profit and loss account. We are now ready to deduct the administrative expenses. This is done by crediting the various expense accounts and charging them to profit and loss account, as shown in the entry on page 172.

164. *Distribution of profits.*—If we were to add the credit in the profit and loss account and deduct from this the total charges to this account, we should find the profit which Mr. Brown has earned during the month. But, being a conservative business man, Mr. Brown realizes that there is a possibility of some of the accounts due him by customers eventually proving uncollectible. Before considering that he has made a profit he decides to set aside one-half of 1 per cent of the net sales as a reserve for possible bad debts. Our next step is to charge the profit and loss account with this one-half per cent—which amounts to $30.27—and to credit an account called reserve for bad debts.

And now Mr. Brown may consider what is left over as the actual profit for the month. This profit may be credited to his drawing account, as shown in the journal on

page 172. Finally, the credit in Mr. Brown's drawing account is transferred to his capital account. This is done in order to show the proprietor's investment in the business in one account. Frequently, however, the drawing account is regarded as a surplus account, the original investment being kept intact.

CHAPTER XIV

PREPARING THE FINANCIAL STATEMENTS

165. *Preparing the profit and loss statements.*—The trading and profit and loss accounts in the general ledger, as we have seen, show definitely the profits available after trading expenses have been deducted and after administrative expenses have been taken out. This information, while temporarily satisfactory, is not presented in such a manner that the proprietor can readily draw the necessary conclusions. In the first place it is incorporated in a bound book where it is not easily available; in the second place it is prepared in technical account form, requiring further calculations on the part of the person examining it; and in the third place the information is not sufficiently sub-divided. For these reasons it is usual to prepare a profit and loss statement in a form similar to that illustrated on page 205. All the information for this statement with the exception of the gross purchases and inventories can be obtained from the trading and profit and loss accounts in the general ledger. It is now merely a matter of rearranging the accounts in a logical narrative form. The purchases and inventories can be ascertained by referring to the purchase accounts.

In this statement we have a continued story of the results of the transactions as viewed by the average business man. The most important features are the sales. From the sales are deducted nearly all the expenses of operating the enterprise. The next question that arises

ALBERT BROWN.
PROFIT AND LOSS STATEMENT
FOR THE MONTH ENDING SEPTEMBER 30, 19__

NET SALES				$6055	00	
PURCHASES		$8023	00			
LESS INVENTORIES		4809	00			
		3214	00			
FREIGHT AND EXPRESS INWARD		11	55			
COST OF HATS SOLD				3225	55	
PRIME PROFIT				2829	45	
SELLING EXPENSES:						
ADVERTISING EXPENSE		219	50			
PACKING MATERIALS	$136.00					
LESS INVENTORY	64.30	71	70			
FREIGHT AND EXPRESS OUTWARD		34	80			
TRAVELING EXPENSES		222	43			
SALESMEN'S SALARIES		100	00			
SALESMEN'S COMMISSION		297	75	946	18	
SELLING PROFIT				1883	27	
ADMINISTRATIVE EXPENSES:						
MANAGERIAL SALARIES		500	00			
SALARIES		73	00			
RENT		125	00			
GENERAL EXPENSES		72	70			
STATIONERY AND SUPPLIES	$61.00					
LESS INVENTORY	28.00	33	00	803	70	
GROSS PROFIT				1079	57	
OTHER INCOME:						
CASH DISCOUNTS GAINED				223	15	
GROSS INCOME				1302	72	
CHARGES AGAINST INCOME:						
CASH DISCOUNTS LOST		45	60			
INTEREST LOST		7	50			
RESERVE FOR BAD DEBTS		30	27	83	37	
NET PROFIT				1219	35	

in the proprietor's mind is likely to be: "How much did the goods cost?" He finds his answer in logical order; that the hats cost him $3,225.55 which left over for the cost of running the business $2,829.45. Then in proper succession answers are found to the other questions that arise: "How much did it cost us to sell these goods? How much did the administrative department cost us? What other income is there? How much did our financial operations cost us?"

166. *Profit and loss analysis.*—In a departmental business, however, a profit and loss statement such as this does not yet present all the information necessary. We find in this case, for example, that the net profit is $1,219.35. For all that, one or more of the departments may be operated at a loss, offset by large profits in the others. Hence the proprietor needs to know the result of the operation of each department.

To provide him with this information it is advisable to prepare an "analysis of profit and loss" such as is illustrated to page 207. Here we find the same information that is given in the profit and loss statement, but in condensed form and separated according to departments. The more important expenses are easily divided among the three classes of hats; others must be approximated. It may be well to consider this statement somewhat in detail.

From the trading account we can readily determine the net sales of each class of hats. The various purchase accounts also tell us the purchases of each class of goods, while the inventories necessarily are duly classified. By referring to the credit cash book it is possible to ascertain how much express and freight inward is applicable to each department. With this information

ALBERT BROWN
ANALYSIS OF PROFIT AND LOSS FOR
MONTH ENDING SEPTEMBER 30, 19___

	MEN'S STIFF HATS			MEN'S SOFT FELTS			WOMEN'S FELT SHAPES			TOTAL		
	AMOUNT		%	AMOUNT		%	AMOUNT		%	AMOUNT		%
NET SALES	2885	00	100	2925	00	100	245	00	100	6055	00	100
PURCHASES	2400	00		4391	00		1232	00		8023	00	
LESS INVENTORIES	842	00		2910	00		1057	00		4809	00	
NET PURCHASES	1558	00	54	1481	00	50.6	175	00	71.4	3214	00	
FREIGHT AND EXPRESS INWARD	2	65		6	50		2	40		11	55	
COST OF HATS SOLD	1560	65	54.1	1487	50	50.8	177	40	72.4	3225	55	53.3
PRIME PROFIT	1324	35	45.9	1437	50	49.2	67	60	27.6	2829	45	46.7
SELLING EXPENSES:												
COMMISSION	144	25	05	147	00	05	6	50	55.5	297	75	
OTHER SELLING EXPENSES	259	37	09	259	37	08.9	129	69		648	43	
TOTAL SELLING EXPENSES	403	62	14	406	37	13.9	136	19	55.5	946	18	15.6
SELLING PROFIT	920	73	31.9	1031	13	35.3	68	59	27.9	1883	27	31.1
ADMINISTRATIVE EXPENSES	321	48	11.1	321	48	10.9	160	74	65.6	803	70	13.0
GROSS PROFIT	599	25	20.8	709	65	24.4	229	33	93.5	1079	57	17.9
OTHER INCOME										223	15	
GROSS INCOME										1302	72	
CHARGES AGAINST INCOME										83	37	
NET PROFIT 12,19% OF CAPITAL INVESTMENT										1219	35	

we are in turn able to calculate the prime profit resulting from the sales of the various kinds of hats.

Of the selling expenses, commission is the only item that can be accurately distributed. We know that the commission is 5 per cent of the sales. The only sales with which our salesman is not credited this month are $115 of women's felt shapes. It is necessary, therefore, to deduct these sales from the $245 of women's felt shapes sales before calculating the commission to be charged to each class of hats. This calculation merely requires finding 5 per cent of the sales in each department.

The other selling expenses must be distributed upon an arbitrary percentage basis. After carefully considering the matter, we determine that the amount of sales in each department represents as equitable a basis as any we might select. But under this arrangement the expense charged to women's felt shapes is too small, the presumption being that our sales efforts were not sufficiently productive in selling women's hats, and not that much less effort was applied. Accordingly, it would be fair to charge women's felt shapes with a little more than the percentage which it would bear if upon a strictly sales basis of distribution. Accordingly, we conclude that it would be equitable to charge 40 per cent sales expenses to men's stiff hats, the same percentage to men's soft felts and 20 per cent to women's felt shapes.

These percentages are also employed in distributing the administrative expenses. The other items in the profit and loss statements have really nothing to do with the various departments, and need not, therefore, be divided. They arise out of the operations of the general enterprise.

We find then that the prime profits in the sale of the

different hats were on the whole fair, although the profit on women's felt shapes ought to have been larger. After the selling expenses have been deducted, however, we discover that the profit on the two kinds of men's hats is satisfactory, but that there is a loss in the sale of women's hats. This loss is further increased when the share of the administrative expenses to be applied to this class of goods are taken into account. Accordingly, while there is a profit on the net operations of the enterprise, we are actually losing money in handling the women's hats. Whether this is because these goods have not been pushed hard enough, or whether the trade is accustomed to buying its women's hats from houses that specialize in them, or whether the quality or style of the hat is unsatisfactory—these are questions that must be answered by the proprietor himself. We are concerned only with pointing out to him the conditions that exist.

The reader will probably have noticed the four columns with the percentage mark at the heads. These percentage columns are an additional aid in analyzing the situation. We find, for example, that the prime profit on women's hats is only 27.6 per cent of the sales as compared with 45.9 per cent and 49.2 per cent in the case of men's stiff and soft hats respectively. The loss seems to be due chiefly to the fact that our expenses for selling women's hats are over 55 per cent of the sales while they are only 14 per cent in the case of men's hats; and that the administrative cost is relatively 65 per cent and 11 per cent. Other interesting facts are that whereas the cost of men's hats sold is about 50 per cent, the selling expense added to the cost of conducting the business is about 25 per cent. This is a satisfactory condition. In all probability we shall drop the women's

hats and concentrate upon the lines in which there is larger profit. Finally we find that the net profit is 11.28 per cent of the capital invested, and this after the proprietor's salary has been included among the expenses. Under the circumstances Mr. Brown is rightly gratified with the results of the first month's business.

167. *Preparing the balance sheet.*—If now we turn to the general ledger, we shall find a number of accounts which have been left open. These are the assets, liabilities and proprietary accounts and exhibit the effect of the month's transactions upon the financial condition of the business. We throw, as it were, into one melting pot all the accounts which indicate increases or decreases in the net wealth, in order to determine what the net increase or decrease is. This result is shown in the profit and loss account which ultimately finds its way to Mr. Brown's drawing account.

We are now ready to determine how much the business is worth. Again going through the ledger page by page, we list roughly all the asset balances on the one hand and all the liability and proprietary balances on the other. If the total of the one side equals the total of the other, we shall know that our work is mathematically correct. It will then be wise to rearrange this information in some logical form—as illustrated on page 211. The assets and liabilities are listed in the order of their liquidity as explained in Chapter III.

The balance sheets show that the business owns $18,-495.87 worth of assets and that it owes $6,971.25. The difference is $11,524.62. By deducting from this amount the $10,000 which Brown invested, we should have the profit for the period, were it not for the fact that part of the difference represents a reserve and part of it the salary which Mr. Brown has drawn. If we de-

ALBERT BROWN
BALANCE SHEET
SEPTEMBER 30, 19___

ASSETS				LIABILITIES		
CASH IN BANK	$8426.85			CREDITORS' ACCOUNTS	$3666	00
PETTY CASH	50.00	$8476	85	NOTES PAYABLE	3000	00
CUSTOMERS' ACCOUNTS		3775	00	W. H. TATTERSALL	297	75
SALESMEN'S ADVANCES		62	72	INTEREST ACCRUED	7	50
INVENTORIES:				TOTAL LIABILITIES	6971	25
MEN'S STIFF HATS	$842.00			PROPRIETORSHIP AND RESERVE		
" SOFT FELTS	2910.00			ALBERT BROWN CAPITAL	10,000	00
WOMEN'S FELT SHAPES	1057.00				1494	35
PACKING MATERIALS	64.30			RESERVE FOR BAD DEBTS	30	27
STATIONERY AND SUPPLIES	28.00	4901	30			
FURNITURE AND FIXTURES		1280	00			
		$18,495	87		$18,495	87

SCHEDULE OF CUSTOMERS' ACCOUNTS
SEPTEMBER 30, 19___

	HOW OLD	AMOUNT	
APFELBAUM DRY GOODS CO.	5 DAYS	100	00
CARTER, PIERSON & MOTT	4 DAYS	1590	00
GOODMAN COHEN & CO.	17 DAYS	120	00
A. KALTENBLATT	9 DAYS	30	00
KELLY AND McGOVERN	7 DAYS	320	00
LARSEN, WEIL & CO.	8 DAYS	1000	00
TUMPELLY HAT CO.	5 DAYS	350	00
UNION DRY GOODS CO.	5 DAYS	265	00
		3775	00

SCHEDULE OF CREDITORS' ACCOUNTS
SEPTEMBER 30, 19___

	HOW OLD	AMOUNT	
HERBERT DESK CO.	28 DAYS	930	00
JONES STATIONERY CO.	24 DAYS	6	00
KEYSTONE BOX CO.	24 DAYS	130	00
MOWBRAY HAT CO.	17 DAYS	2600	00
		3666	00

duct these two amounts, we shall find that the profit found in this simple manner is the same as the profit which appears on the profit and loss statement obtained by the process previously described in this chapter.

168. *Customers' and creditors' schedules.*—The balance sheet gives us only the amount due us by customers and the amount which we owe our creditors. The proprietor, in all probability, will want some convenient method of running over these accounts, to determine their condition. At the time we prepared our trial balances of the customers' and creditors' ledger we actually obtained statements that would give him this information. In addition to merely stating the balances, however, it is wise to indicate how old these balances are so that the proprietor or his credit manager, if he has one, can tell quickly what accounts are becoming old. If we examine the schedule of customers' accounts on page 212, we see that Goodman, Cohen and Company have not taken advantage of the cash discount terms. This may indicate danger or it may not. At any rate Mr. Brown will probably watch this account closely, and seek additional information about this customer.

It may already have occurred to the reader that so far as final results are concerned, accounting procedure is merely a simple mathematical process. Thus, in order to find the profits, it is only necessary to add and subtract. When, however, in order to obtain such information as is indicated in the section on "profit and loss analysis," we seek to determine how the profit was created something more than mere mathematics is required.

PART III: VARIOUS FORMS OF ACCOUNTING

CHAPTER XV

PARTNERSHIPS

169. *Definition and importance of partnership.*—Probably the earliest record of a partnership is that narrated in Genesis between Abraham and Lot as farmers and graziers, which before long resulted in a dissolution through disagreement among their herdsmen.

"And there was strife between the herdsmen of Abraham's cattle and the herdsmen of Lot's cattle."

In "Commercial Law," Volume XII of the Modern Business text, partnership is defined as "A legal relation existing between two or more persons who have agreed either expressly or impliedly to combine, as principals, their property, labor or skill in carrying on a lawful business enterprise for their joint profit." Frequently, circumstances make it beneficial, advantageous, profitable, and at times even compulsory, for one man or class of men to join others in a lawful enterprise for the purpose of making profits. The man with capital naturally seeks the man with ability, ideas or patents. The inventor likewise seeks the capitalist. Competitors often unite to stop cut-throat competition, and protect their mutual interests.

Notwithstanding the fact that the corporation is today the prevalent form of business organization, the part-

nership is by no means an obsolete institution. The remarks of Dr. Jackson, of England, in a paper read some years ago before the Chartered Accountants Students' Societies of Kingston-upon-Hull, England, are still true. Dr. Jackson at that time said:

> Next to the contract of marriage, the contract of partnership is perhaps the most far-reaching legal contract; it requires the utmost good faith between the parties. It deals not only with the status of the firm created by the partnership agreement; it treats not only of the relationship of the parties among themselves and with the firm, but it introduces the various combinations of rights and obligations, which may arise between the firm or its respective partners and the world at large.

170. *Knowledge of partnership law advisable.*—A not inconsiderable portion of the income of the legal profession comes from cases arising out of complications due to ignorance of, or inattention to, the legal phases of the partnership relationship. It is not intended here to discuss partnership law but rather to emphasize strongly the need for careful attention to the legal aspects involved. The average person entering into partnership relations does not stop to consider the position in which he places himself. Usually the subject is dismissed from his mind with the thought that the partnership can always be dissolved. If, moreover, a provision to that effect is entered in the partnership agreement, he feels certain of being able to relieve himself of the relationship should he so desire. The danger of such superficial reasoning is illustrated by the following case:

C, who was in the laundry business in partnership with X, and who by a clause in their articles of co-partnership

had agreed not to enter into any other partnership relation, violated this clause. Owing to trade depression the profits in the laundry enterprise for the time had become nominal. C, therefore, secretly entered into a partnership with S, a retail jeweler. C, by reason of his good reputation in the business community, proved a valuable aid to S, who thereby was enabled to buy large quantities of merchandise on notes, signed S. & Company.

In a few months the laundry business revived, while the jewelry business steadily declined. C now resolved to dissolve his partnership with S. By mutual agreement the latter was to meet the notes at their maturity; but this he failed to do. C was sued as a partner, and as S became bankrupt, C had either to pay out thousands of dollars, or prosecute S for issuing notes with the firm signature after the dissolution of the partnership which S had done by ante-dating. But granted that C could obtain evidence to prove that S defrauded him, he would by this act disclose that he had violated his prior agreement with X. In a pecuniary sense the dissolution with X would have been a greater loss than the paying of S's notes. He chose the latter as the lesser of the two evils and paid the notes.

Partnership is a relation into which a person is easily tempted to enter, but from which it is often difficult to escape. Indeed, it frequently happens that a business man forms a partnership with one or more persons in the belief that he is merely a participant in a "deal." Under the law, a legal partnership relation exists when the following elements are present:

(a) An agreement (verbal or written);
(b) Competent parties to enter into the agree-

ment (minors, aliens, insane persons, etc., are incompetent parties);

(c) A lawful enterprise;

(d) Profit sharing as a motive.

Indeed, Justice Lindley in his work on "Partnership," says that "Nothing, perhaps, can be said to be absolutely essential to the existence of a partnership except a community of interest in profits, resulting from an agreement to share them."

171. *Various classes of partnerships.*—Partnerships may be divided into the following classes, with proper subdivision:

(1) General partnership; subdivided as follows:

(a) Trading partnership, formed for the purpose of buying, lending, etc.

(b) Non-trading partnerships, which do not buy, manufacture or lend, as a principal part of their undertaking.

(2) Special partnerships; formed for special enterprises, such as: Joint ventures or adventures.

(3) Mining partnerships; the chief feature of this class of partnerships is that while the co-owners are partners as to the profit sharing, the partnership does not extend to the property.

(4) Limited partnerships; formed only under special statutes; the dominant feature of this class of partnership is that as long as certain of its members are inactive, their liability is limited to the amount actually invested by them.

(5) Joint stock companies; the ordinary partnership with this distinction, however: that the members thereof may transfer their interests without dis-

solution of the firm, as proprietorship is proved by the possession of the shares of stock similar to shares of corporations.

172. *Kinds of partners.*—There are also various kinds of partners, and hence the difficulty arises as to who are partners. The number of persons who may unite for the purpose of forming a partnership is not limited in any of the states in the Union, while in England the Limited Partnership Act of 1907, provides that the number of persons who may form a "general" or "limited" partnership is restricted to ten in the case of a banking business, and to twenty in the case of any other business.

There are five classes of partners which briefly may be listed as follows:

(1) Public or ostensible partner; an active and known member of the partnership.

(2) Secret partner; although in reality a partner, he conceals the fact from the public.

(3) Nominal partner; having no partnership relation with the other members of the firm, yet announced to the public as a partner by his own consent, because he has given his credit to the firm.

(4) Silent or dormant partner; taking no active part in the business of the firm, but sharing profits. The silent partner differs from the secret partner in that the former, while also concealing his identity from the public, actually does take part in the management of the firm's affairs.

(5) Special or limited partner; where the statutes provide for limited partnerships. He contributes a certain sum of money, and is not liable for the debts of the firm beyond the sum he has contributed.

There is no assurance, however, that special or limited partners will enjoy absolute immunity. The members of a limited partnership are real partners and through some slight irregularity may, in the eyes of the law, become general partners. Great caution, therefore, should be observed in entering upon such relations, and due safeguards provided in the limited partnership agreement.

173. *Rights, duties and liabilities of a partner.*—Although partnership law is discussed in detail in "Commercial Law," Volume XII of the Modern Business Texts, it may be of interest here to list briefly the rights, duties and liabilities of a partner, since, as we shall see, these details are important in the handling of partnership accounts:

(1) Each partner is an agent for his co-partners in all the transactions falling within the scope of the partnership, and, therefore, binds all the members of the firm to any contract into which he may enter.

(2) In the absence of an agreement to the contrary, each partner shares equally in the profits or losses of the business. The partnership investment does not determine a partner's interest in the business. There is no necessary relation between a partner's investment and his participation in the profits or losses of the firm. In case there is an agreement as to the sharing of profits and no agreement as to the sharing of losses, it is assumed that the losses are to be shared in the same proportions as the profits.

(3) In case of insolvency, each partner is personally liable for all the firm's obligations. It is in this most important feature that a partnership is so distinctly different from a corporation.

(4) All the firm's property, including good-will and other intangible possessions, forms a common fund of the partnership. This is also true of any subsequent acquisitions of property with partnership funds.

(5) A new member cannot be introduced into the firm unless *all* partners agree thereto. The admittance of a new member automatically dissolves the old partnership and creates a new one.

(6) A partner may upon dissolution of the partnership demand an accounting to ascertain his interests in the business.

(7) A partner cannot claim any interest either on his required investment or other asset, unless expressly stipulated; nor can he claim any interest on profits left in the business.

(8) If a firm dissolves and no disposition is made of the firm's name, each partner has an equal right to its use, and may engage in business thereunder.

(9) Each partner has equal power over the property of the firm.

(10) A firm cannot hold real estate, as the law does not recognize it as a legal entity, capable of holding real property.

(11) A person who is admitted as a partner in an existing firm does not thereby become liable for debts incurred previous to his admission into the partnership.

(12) The retirement of a partner does not release him from debts of the firm incurred previous to his retirement. A retiring partner may be so released by an agreement between the new firm, the creditors and himself. The assent of the creditors is impor-

tant; such assent, however, may be implied and need not be expressly given.

(13) A retiring partner not only remains liable for existing debts, but may also be held liable for debts incurred *after* his retirement, unless he gave due notice of his retirement to all those who had dealings with the firm.

(14) The acts of one partner, in the usual business relating to the firm, are the acts of all, even if contrary to the partnership agreement, unless the party with whom he is dealing has knowledge of his lack of authority. Thus, if a partner sells the goods of the firm and misapplies the proceeds of the sale, he nevertheless gives a good title to the buyer.

(15) No services performed, whether ordinary or extraordinary, can be charged against the firm.

(16) A partner cannot bind the firm by a guarantee of the debts of a third person, unless such has been the practice of the firm.

174. *The partnership agreement.*—Enough has been said to indicate that numerous complications may arise in the legal relations of the partners. These also affect the accounting entries. The accountant frequently is confronted with the necessity of deciding, in the absence of a previous agreement or in case of dispute between the partners, what should be the equitable distribution of this or that charge or credit among the partners. The person in charge of the accounting records must be guided by the existing agreement between the partners. If no specific agreement exists, an effort must be made to determine what was the intention of the partners. If a situation arises, the possibility of which had not even been considered, the task becomes one of determining what

is fair and just. To guard against unsatisfactory situations of this kind, which in many cases lead to the disruption of a profitable enterprise, the prospective partner should insist upon the preparation of a formal agreement in which as many contingencies as possible are provided for.

The usual clauses in articles of co-partnership, as these agreements are termed, are the following:

(1) Name of firm.

(2) Place of business.

(3) Nature of business.

(4) Date of commencement and the duration of the partnership.

(5) Capital to be invested.

(6) Provision in regard to interest on capital invested, if this be agreed upon.

(7) Provision as to sharing profit or loss.

(8) Provision as to withdrawals, and how to treat them.

(9) Provision as to admitting new partners, and how to adjust the affairs upon admission; especially if the good-will is to be taken into consideration.

(10) Provision for the accurate keeping of records of all business transactions, and the preparation of periodical financial statements.

(11) Provision for procedure in case of dissolution.

175. *Reference list.*—It may be well to enumerate briefly—especially for reference purposes—some points to which Professor Hardcastle, in his pamphlet on "Partnerships," and elsewhere, calls attention as of importance in the preparation of articles of co-partnership:

(1) That the partners shall be true and just to each other.

(2) That they shall diligently employ themselves, or apportion their services, deciding which shall take the managing part, and which the other parts.

(3) That they shall promptly communicate all partnership transactions to each other.

(4) That they shall not engage in other business.

(5) That they shall employ the firm's property for the exclusive benefit of the firm.

(6) That they shall not engage the firm's credit for their private use.

(7) That they shall not buy any kind of merchandise or goods, beyond a certain amount, without the consent of the others.

(8) That they shall not transact any business that is against the wishes of the majority of the members composing the firm.

(9) Nor lend the money of the firm.

(10) Nor file petitions in bankruptcy.

(11) Nor draw bills or accept drafts, except in the usual course of business.

(12) Nor extend excessive credit without the consent of the others.

(13) Nor speculate in stocks or otherwise, except in such speculations as pertain to the business.

(14) That they shall not become bondsmen or sureties.

(15) That they shall not assign their interests in the business.

(16) Nor withdraw their capital or any part thereof.

(17) Nor do anything by which the firm's property may be taken in execution.

ACCOUNTING CLAUSES.

(18) That proper books of entry be kept.

(19) That the entries be accessible to each partner.

(20) That the books and partnership documents be kept at the place of business and that they be open for the inspection of all the partners.

(21) That the books be kept under the direction of the acting partner.

(22) That all checks, drafts, acceptances, etc., be signed by the acting partner, except in the case of his sickness or absence.

(23) That all drafts, acceptances, or securities, be made and taken in the name of the firm.

(24) That real estate purchased be bought by the acting partner in trust for the firm.

(25) That the (give name) bank be used by the firm.

(26) That the cashbook be made up . . . (state time—monthly, quarterly, etc.).

(27) That the cash collected be deposited daily.

(28) That all moneys received by each partner be duly paid in.

(29) That a general accounting be made yearly or half-yearly.

(30) That the inventory and the balance sheet be signed by each partner and be conclusive.

(31) That the ledger, among other accounts, shall contain:

(a) An account for each partner's partnership obligations, which shall be debited with the amount the partner obligates himself to put in the business, and credited with what he actually puts in.

(b) A drawing account for each partner to keep separately his withdrawals.

(c) If there be advances made by any partner to the firm as a temporary loan, an account should be kept under the title "A. B.'s Loan to Firm Account."

(d) Before a division of profits be declared, the profit and loss account shall be debited with, say, 10 per cent on diminishing balances on the fixed capital subject to depreciation, and depreciation account credited with the same amount. The depreciation account shall in the balance sheet always be treated as an offset to the fixed capital subject to depreciation.

(e) There shall also be two reserve accounts —one, the reserve accounts for doubtful debts, and the other the general reserve account. The former shall be credited with . . . per cent of the debts due the firm and remaining unpaid at the time of closing up the accounts, as a contingent fund to meet bad debts; and the latter, the general reserve account, shall be credited with . . . per cent of the balance remaining in the profit and loss, and the profit and loss account debited.

(f) Extraordinary profits and losses, i. e., such as do not usually occur, but are accidental, shall, as they arise, be carried to the general reserve account. The remaining profit and loss should now be duly divided and carried into each partner's drawing account (credit side). The drawing accounts are then closed and the balances carried to each partner's capital account.

CHAPTER XVI

PARTNERSHIP ACCOUNTS

176. *Opening partnership books.*—The actual operation of opening a set of account books for a partnership does not differ materially from that of opening a set of books for an individual concern. The difference is merely that instead of crediting one proprietor with the amount of his investment, we credit two or more proprietors.

Suppose, for example, that in the hat business, discussed in Chapters XII, XIII and XIV, Albert Brown had invested only five thousand dollars and that George Smith, after forming a partnership agreement with him, had contributed the other five thousand dollars. The agreement, let us say, calls for the sharing of profits or losses equally, and the payment of a salary of two hundred and fifty dollars a month to each. Mr. Brown is to have sole charge of the sales and buying activities, and Mr. Smith of the financial, accounting and office activities, including all purchases other than hats.

The opening entries would differ only in these respects: the memorandum in the journal would be more complete, setting forth the essential details of the copartnership agreement as just outlined. There would be two cash book entries for the investments, one crediting Albert Brown with five thousand dollars, the other crediting George Smith's capital account with the same amount.

Suppose that instead of the partners contributing

$5,000 each, Brown had contributed ten thousand dollars in cash and Smith an equity in a small office building, the equity amounting to twenty-five thousand dollars. The total value of the property, let us say, is seventy-five thousand dollars, but a mortgage of fifty thousand dollars is recorded against it.

The opening memorandum in the journal would be as in the foregoing case, except that it would be changed to correspond with the new facts. In the cash book, Brown's cash contribution would be recorded in the usual manner, but Smith's would require somewhat different treatment. It would be necessary to enter his investment in the journal, placing upon the book the full value of the property as well as the amount of the mortgage, and giving Smith credit for his equity. The journal entry would be about as follows:

Real estate (or office building)	$75,000.00	
Mortgage payable		$50,000.00
George Smith's capital account . .		25,000.00

To record George Smith's investment in the firm of Brown & Smith, i. e., a $25,000.00 equity of the office building at ——— ———, Mr. Smith has transferred the ownership of the property, the full value of which is $75,000.00, and upon which a mortgage of $50,000.00 exists, to the joint ownership of Messrs. Brown & Smith. The deed has been filed in the ——— Safe Deposit Vaults.

If a balance sheet were drawn at this point, it would contain the following items:

Cash	$10,000.00	Mortgage payable .	$50,000.00
Real estate	75,000.00	Albert Brown.	10,000.00
		George Smith.	25,000.00
Total	$85,000.00	Total	$85,000.00

177. *Distributing partnership profits.*—The next distinctive feature in the accounts of a partnership arises out of the apportionment of profits and losses. Again taking as an illustration the hat enterprise discussed in Part II, it may be interesting to determine how the profit of $1,219.35 would be distributed between the partners. If the reader in following this discussion will turn to the journal illustrated on page 172, the entire matter will rapidly become clear. It will be recalled that there we transferred the entire profit to Brown's drawing account. Had George Smith at that time been a partner and entitled to one-half the profits, the final journal entry would have read:

Profit and loss account.................	$1,219.35	
Albert Brown drawing account......		$609.67
George Smith drawing account......		609.68

To transfer one-half the net profits to each of the partners' drawing accounts, in accordance with the co-partnership agreement, dated ———.

While this operation is simple enough, it is nevertheless at this point that many of the intricate problems in partnership accounting and partnership law arise. This is not because of any difficulty experienced in properly distributing profits and losses when the conditions of the partnership are fully known, but because the agreement is not always clear as to each partner's share in the enterprise.

Thus in one case, a wealthy New Yorker contributed the larger share of the firm's investment in consideration of receiving two-thirds of the profits. Nothing was stated in the co-partnership agreement as to the sharing of losses. It was the implied, although not the ex-

pressed understanding, however, that this partner was not sharing in the losses to the same extent that he shared in the profits, since his financial risk was already great. Such, at least, was his contention when after a time losses occurred and two-thirds of them were charged to his account. He was compelled, however, to accept his two-thirds share of loss, since under the law losses and profits are assumed to be distributed in equal proportions.

178. *Interest on capital invested.*—In the distribution of profits or losses, the question of allowing interest upon the partners' investments frequently arises. As already noted, a partner is not entitled to interest upon his investment unless expressly provided for in the copartnership agreement. So far as the accounting records are concerned, the question is simple. Either interest is to be allowed or it is not. If allowed, the amount is stated in the agreement. If not in the agreement no interest is allowed.

Occasionally the partnership agreement simply says that the partners are to be allowed interest upon their investment. Where the investments are equal and the partners are to share equally, this seems an unnecessary provision since the net amount credited to each partner would eventually be the same in either case. Where, however, the profits are not to be shared equally, though the amounts invested were equal, it is assumed that the sharing of profits is not altogether based upon capital invested. In such a case, it seems entirely proper to consider the investments separately and to allow interest upon the amount contributed by each partner.

Generally, where one partner invests more than another, it seems equitable either to allow interest on the full amount of each partner, or to allow interest on the

excess in the case of the partner who has contributed the greater share of the capital.

From a broader economic point of view, however, it would undoubtedly be proper to credit the partners with interest on their capital contribution inasmuch as no profit can be said to have been earned until the interest which the capital would normally have earned if otherwise invested, has been deducted from the gross profits.

179. *Partnership dissolution.*—The third distinctive feature peculiar to partnership records lies in the procedure necessary when a firm is to be dissolved. In passing, it should be recalled that the life of a partnership is much more easily destroyed than that of a corporation. The death of a partner, his withdrawal, or the sale of his interests to another; a violation of the partnership agreement, friction among the partners, or other causes, none of which would affect the existence of a corporation, may result in the winding up of the partnership affairs.

The subject must be considered from two points of view. On the one hand, we have a dissolution which is final—that is to say, the partnership is entirely disbanded, the business going out of existence. On the other hand, there is the dissolution of one partnership and the creation of another or of a corporation to take its place. The chief difference between the two cases, is that in the latter the question of good-will arises. The retiring partner may feel that inasmuch as he has been instrumental in building up the trade and reputation of the business, his equity in the firm is more than the amount credited to his account upon the books. He knows that if the business were sold the price obtained would probably be considerably higher than the excess

value of assets over liabilities, and does not see why he should relinquish his share of their intangible value—known as good-will. The procedure may be more easily comprehended if one or two typical cases are examined.

180. *Final winding up of partnership affairs.*—The partners, A, B, C and D, had a partnership agreement in writing, which in addition to the ordinary clauses usually found in partnership agreements, contained the following special provisions:

(1) The capital of the firm is to be $100,000 and is to be contributed by the members as follows: A, one-half; B, one-fourth; C, one-fifth; and D, one-twentieth.

(2) Interest is to be allowed at the rate of 6 per cent per annum on any amount contributed by any member of the firm in excess of the required investment, and is to be charged on any deficiency.

(3) No withdrawals are to be made by any partner, other than the salary allowance hereafter mentioned and the profits credited to his account.

(4) Each partner is to be allowed a yearly salary, the amount to be determined at the beginning of each year. This he may withdraw monthly or otherwise. Such salary allowance is to be credited at the end of the year to the drawing account of each partner.

(5) All adjustments among the partners for interest on capital, drawings, etc.,—are to be made at the end of each year, after the trial balance of the ledger accounts has been taken.

The amounts appearing on the trial balance with such adjustments as may be necessary, are to form the basis of settlement.

(6) Profits and losses are to be divided as follows: A, fifty per cent; B, twenty-five per cent; C, fifteen per cent; D, ten per cent.

At the close of the fiscal year, when the partnership has been in existence for four years, it is found necessary to wind up the affairs, owing to serious differences having arisen among the partners. The partners therefore ask their bookkeeper to prepare a trial balance of the ledger accounts and to furnish them with all the information necessary for the adjustment, in accordance with the partnership agreement. The trial balance submitted by the bookkeeper shows the following ledger balances:

TRIAL BALANCE, DECEMBER 31, 19—

Cash	$87,500.00	
Notes receivable	76,000.00	
Accounts receivable	122,450.00	
Merchandise inventory (January —)	32,000.00	
Land and building	25,000.00	
Furniture and fixtures	7,000.00	
Notes payable		$21,000.00
Accounts payable		101,000.00
Mortgage on building (5% interest)		10,000.00
Sales		356,200.00
Allowance on sales	1,500.00	
Purchases, merchandise	200,000.00	
Freight inward	700.00	
Packing materials	1,300.00	
Salesmen's traveling expenses	6,000.00	
Advertising	1,800.00	
Insurance on building	200.00	
Commissions	7,200.00	
Taxes	500.00	

Insurance on stock	$1,000.00	
Freight outward	1,600.00	
Cash discount gained		$2,800.00
Interest on mortgage	500.00	
Salaries (including partners')	20,000.00	
Light, heat and power (office)	1,000.00	
Interest lost	1,200.00	
Reserve for bad debts		5,150.00
Reserve for depreciation on building		2,000.00
Reserve for depreciation on furniture and fixtures		1,000.00
A, capital account		52,500.00
B, capital account		23,275.00
C, capital account		13,400.00
D, capital account		4,125.00
A, drawing account		500.00
B, drawing account		500.00
C, drawing account		500.00
D, drawing account		500.00
	$594,450.00	$594,450.00

The partners are further notified that part of the insurance premiums has not expired; that of the premium paid for insurance on the building, $20, has not yet been put through, and that $100 of the insurance premium on stock is also unexpired.

The inventories are as follows:

Packing materials	$150.00
Merchandise	34,200.00

It is agreed that the depreciation of various assets should be calculated at the following percentages, based on the net balance after deducting the depreciation of former years as shown by the various depreciation accounts:

Building	2 per cent
Furniture and fixtures	10 per cent
Reserve for bad debts	5 per cent

181. *The first step.*—Before any action relating to the dissolution of the company is taken, it will be necessary to know what is the present financial condition of the concern. As we have already learned, this information is obtained by preparing a profit and loss statement and a balance sheet. In this case we shall consider the profit and loss in account form. This is a form frequently found in practice and should be clearly understood. An examination of the profit and loss account of the firm of A, B, C & D, shown on pages 235 and 236, will quickly show the similarity between this statement and that illustrated in Chapter V. Instead, however, of placing the cost and expenses under the sales, they are here presented on the debit side of the statement, just as they appear in the trial balance, while the sales and other income items are presented on the credit side.

The last section of this statement is of special interest to us in this case. Having found the net profit for the year, it is necessary to distribute it among the partners, after the interest adjustment has been made. We shall assume that all the interest calculations are to be made upon the basis of one year.

A's investment was to have been $50,000, but we find his capital account credited with $52,500—an excess of $2,500. In addition, he is allowed $500 for his drawing account. A, therefore, is credited with interest at 6 per cent upon $3,000.

B's capital investment on the other hand shows a deficiency of $1,725. To offset this, B has allowed $500

PROFIT AND LOSS ACCOUNT OF THE FIRM OF A, B, C & D, DECEMBER 31, 19—

Merchandise inventory January 1	$32,000.00		Sales	$356,200.00	
Purchases	200,000.00		Less allowances	1,500.00	
	$232,000.00		Net sales		$354,700.00
Less inventory, December 31	34,200.00				
	$197,800.00				
Freight inward	700.00				
Cost of goods sold		$198,500.00			
Packing materials	$1,300.00				
Less inventory	150.00				
		1,150.00			
Salesmen's traveling expenses		6,000.00			
Advertising		1,800.00			
Commissions		7,200.00			
Freight outward		1,600.00			
Selling or trading profit		138,450.00			
		$354,700.00			$354,700.00

PROFIT AND LOSS ACCOUNT OF THE FIRM OF A, B, C & D, DECEMBER 31, 19—CONTINUED

Salaries (including partners')		$20,000.00	Selling or trading profit	$138,450.00
Heat, light and power		1,000.00		
Taxes		500.00		
Insurance on building	$200.00			
Less unexpired	20.00			
		180.00		
Insurance on stock	1,000.00			
Less unexpired	100.00			
		900.00		
Reserve for depreciation of building (2% of $18,000.00)		360.00		
Reserve for depreciation of furniture and fixtures (10% of $6,000.00)		600.00		
Reserve for bad debts (5% of $122,450.00 $76,000.00)		9,922.50		
Gross profit		104,987.50		
		$138,450.00		$138,450.00
Interest on mortgage (1 year)		$500.00	Gross profit	$104,987.50
Interest lost (current)		1,200.00	Cash discount gained	2,800.00
Net profit, exclusive of interest on investment		106,087.50		
		$107,787.50		$107,787.50
Interest on A's excess investment (6% of $3,000.00)		$180.00	Net profit	$106,087.50
			Interest on B's deficient investment (6% of $1,225.00)	73.50
Distribution of net profits:				
A. 50%		53,184.75	Interest on C's deficient investment (6% of $6,100.00)	366.00
B. 25%		26,592.38		
C. 15%		15,955.42	Interest on D's deficient investment (6% of $375.00)	22.50
D. 10%		10,636.95		
		$106,549.50		$106,549.50

to remain in his drawing account. Accordingly he must be charged with interest on a net deficiency of $1,225.

C's and D's cases are similar. C's capital is short $6,600, but he, too, has allowed $500 to remain in his drawing account, so that the net deficiency is $6,100. D's net deficiency is $375 instead of $875, as shown by his capital account.

It is not necessary to charge or credit these interest adjustments to any account on the general ledger, since they are immediately absorbed in the distribution of profits. Thus the $73.50 is immediately divided among the partners by being added to the net profits shown above, while each partner, including A himself, shares a part of the interest allowed to A through its deduction from the net profits. We find that after these additions and deductions have been made $106,369.50 remains to be divided according to the terms of the agreement. Ordinarily this amount, together with the interest adjustment, would be entered in the partners' drawing accounts. In this instance, however, as the business is to be discontinued, there is no necessity for continuing the drawing accounts; accordingly the $500 credited to each partner in his drawing account should be transferred to his capital account, which should also be credited or charged, as illustrated in the statement of the profit and loss account. (See pages 235 and 236.) Often, when the process of dissolution is complicated and long drawn-out, the drawing accounts are continued and transferred at the final closing.

We may now prepare the balance sheet in order that the partners may know what firm property is to be disposed of, what debts are to be paid, and what the amount of each partner's interest in the firm.

BALANCE SHEET OF THE FIRM OF A, B, C & D, DECEMBER 31, 19—

Current Assets:		
Cash		$87,500.00
Notes receivable		76,000.00
Accounts receivable		122,450.00
Inventories:		
Merchandise	$34,200.00	
Packing materials	150.00	34,350.00
Fixed Assets.		
Land and building		25,000.00
Furniture and fixtures		7,000.00
Deferred Assets.		
Insurance premiums (unexpired)		120.00
		$352,420.00

Current Liabilities:		
Notes payable	$21,000.00	
Accounts payable	101,000.00	$122,000.00
Fixed Liabilities.		
Mortgage on building		10,000.00
Proprietorship and Reserve.		
Reserve for depreciation of building	$2,360.00	
Reserve for depreciation of furniture and fixtures	1,600.00	
Reserve for bad debts	15,072.50	19,032.50
A's capital account	106,364.75	
B's capital account	50,293.88	
C's capital account	29,489.42	
D's capital account	15,239.45	201,387.50
		$352,420.00

BALANCE SHEET OF THE FIRM OF A, B, C & D, JANUARY 2, 19—

Current Assets.		
Cash		$62,500.00
Notes receivable		76,000.00
Accounts receivable		122,450.00
Inventories:		
Merchandise	$34,200.00	
Packing materials	150.00	34,350.00
		$295,300.00
Fixed Assets.		
Land and building		25,000.00
Furniture and fixtures		7,000.00
Good-will		110,914.20
Deferred Assets.		
Insurance premiums (unexpired)		120.00
		$438,334.20

Current Liabilities.		
Notes payable	$157,208.08	
Accounts payable	101,000.00	258,208.08
Fixed Liabilities.		
Mortgage on building		10,000.00
Proprietorship and Reserves.		
Reserve for depreciation of building	$2,360.00	
Reserve for depreciation of furniture and fixtures	1,600.00	
Reserve for bad debts	15,072.50	19,032.50
A's capital account	106,364.75	
C's capital account	29,489.42	
D's capital account	15,239.45	151,093.62
		$438,334.20

It will be noted that the balance sheet on page 238 exhibits the current, fixed and deferred assets and liabilities as well as the proprietorship and reserve in separate sections, thereby presenting clearly certain information that is of distinct value under the circumstances. It will be convenient to have before us a list of those assets which probably can be turned into cash without difficulty as well as of those that are more or less permanent and which for that reason are more difficult to liquidate. In fact, as a general practice, some such form of balance sheet is much more useful than one in which all the assets are thrown together and in which all the liabilities and the proprietary accounts are listed without subdivision.

182. *Liquidating the business.*—Ordinarily, in cases of this kind, either one of the partners or an outside person is appointed to assume charge of the liquidation proceedings. Usually, too, the process is long drawn out, and requires a more or less elaborate realization and liquidation account or statement. To avoid such complications for the present, we shall assume that all the liquidating transactions took place on the last day of the year, and that the partners disposed of the property and paid the debts without calling in outside assistance. The reader will understand that the condition as presented here is purely hypothetical and not likely to occur in actual practice. It is introduced here merely to illustrate the proceedings in as simple a manner as possible. A more complicated case occurs in Chapter XXIV.—"Realization and Liquidation and Insolvency Accounts."

On the 31st of December, then, the partners either collect or sell to others at par the notes receivable; dispose of the accounts receivable, though losing $12,000

in uncollectible accounts; sell the merchandise and packing materials on hand at the prices quoted; sell the plant and building for $25,000, since the depreciation is offset by the increased land value, the purchaser assuming the $10,000 mortgage as part payment; sell the furniture and fixtures at the book value, less depreciation; and collect $120 from the insurance company for the unexpired premium. They also pay outstanding accounts which they owe.

Our first step is to record the receipts of cash for the notes and accounts receivable, inventory, the land and building, furniture and fixtures and insurance, as shown in the entry on page 242. The next is to record the payment of the notes and accounts and to wipe out the mortgage which has been assumed by the purchaser of the land and building. Some of the reserve has been drawn upon to make good and to offset the shrinkage in values of the assets. The reserve for depreciation of furniture and fixtures is drawn upon for $1,600 while $12,000 is taken out of the reserve for bad debts. The reserve for depreciation of building is not used, and we find that $3,072.50 more than necessary was set aside for bad debts. These reserves were taken from the profits and may now be distributed among the partners as the profits would have been had they not been withheld.

After all these entries have been made, we shall find that the only accounts open on the ledger are the partners' capital accounts and the cash account. These accounts are illustrated on pages 243-244. Obviously, the only thing left to do is to pay each partner outright in cash for his share in the firm as represented by the credit in his capital account.

Cash	$241,320.00	
Notes receivable		$76,000.00
Accounts receivable		110,450.00
Inventory of merchandise		34,200.00
Packing materials		150.00
Land and building		15,000.00
Furniture and fixtures		5,400.00
Insurance premiums unexpired		120.00
The above assets were sold for cash.		
Notes payable	$21,000.00	
Accounts payable	101,000.00	
Cash		$122,000.00
Paid all the above liabilities.		
Mortgage on building	$10,000.00	
Land and building		$10,000.00
The mortgage on our building was assumed by the purchaser of the building and lot in part payment of the purchase price.		
Reserve for depreciation of furniture and fixtures	$1,600.00	
Furniture and fixtures		$1,600.00
To reduce the furniture and fixture account to the actual value as shown by the reserve which was deducted in the sale of this asset.		
Reserve for bad debts	$12,000.00	
Accounts receivable		$12,000.00
To charge reserve for bad debts with the uncollectible accounts.		
Reserve for depreciation of building	$2,360.00	
Reserve for bad debts	3,072.50	
A's capital account		$2,716.25
B's capital account		1,358.13
C's capital account		814.87
D's capital account		543.25

To credit the partners with their shares of the reserves which had been set aside in excess of requirements.

A's capital account	$109,081.00	
B's capital account	51,652.01	
C's capital account	30,304.29	
D's capital account	15,782.70	
Cash		$206,820.00

To distribute among the partners the cash realized from the sale of the firm's assets.

CASH ACCOUNT.

Balance	$87,500.00	Notes payable	$21,000.00
Notes receivable	76,000.00	Accounts payable	101,000.00
Accounts receivable	110,450.00	A	109,081.00
Inventory of merchandise	34,200.00	B	51,652.01
Packing materials	150 00	C	30,304.29
Land and building	15,000.00	D	15,782.70
Furniture and fixtures	5,400.00		
Insurance premiums (unexpired	120.00		
	$328,820.00		$328,820.00

A'S CAPITAL ACCOUNT.

December 31.	Cash	$109,081.00	January 1.	Balance	$52,500.00
			December 31.	Drawing to Account	500.00
				Interest on excess investment.	180.00
				50% of net profit	53,184.75
				Share of excess reserves	2,716.25
		$109,081.00			$109,081.00

B'S CAPITAL ACCOUNT.

December 31.	Interest on deficient investment	$73.50	January 1.	Balance	$23,275.00
	Cash	51,652.01	December 31.	Drawing account	500.00
				35% of net profit	26,592.38
				25% of excess reserves	1,358.13
		$51,725.51			$51,725.51

C'S CAPITAL ACCOUNT.

December 31.	Interest on deficient investment..	$366.00	January 1.	Balance.....	$13,400.00
	Cash......	30,304.29	December 31.	Drawing account..	500.00
				15% of net profit.....	15,955.42
				15% of excess reserves....	814.87
		$30,670.29			$30,670.29

D'S CAPITAL ACCOUNT.

December 31.	Interest on deficient investment..	$22.50	January 1.	Balance.....	$4,125.00
	Cash......	15,782.70	December 31.	Drawing account...	500.00
				10% of net profit.....	10,636.95
				10% of excess reserves....	543.25
		$15,805.20			$15,805.20

183. *When one partner retires.*—It is unusual for a firm in so flourishing a condition to go out of business. It is more likely that the disgruntled partner will withdraw, provided his demands are not too excessive. Suppose in this case, for example, that there had been a clause in the co-partnership agreement to the effect that in the case of the retirement of one or more partners or members of the firm, each retiring member would be entitled, in addition to the amount appearing on the credit side of his ledger account, to an additional amount for good-will, and that the valuation of the good-will was to be one-half of the last two years' net profit, excluding partners' interest on investments. Suppose, also, that B has concluded to withdraw under this agreement and that the profits last year were $115,740.90.

The retirement, in effect, constitutes the dissolution of the firm of A, B, C and D. The remaining partners

create a new partnership, and take over the business of the old. In practice, a new agreement is usually drawn, but it is not necessary to start a new set of books, although this, too, sometimes is done. In cases where a change in ownership is more radical, it is advisable to close the books for the old firm and open a new set for the new.

The preliminary steps in this case are similar to those taken in the illustration of complete dissolution of the firm of A, B, C and D. It is necessary to prepare a profit and loss account and a balance sheet like those found on pages 235-236, and 238-239. Now, however, instead of the liquidation entries illustrated in the journal on page 242, we have a separate set of transactions. In the first place, we must calculate the value of the interest in the firm's good-will as instructed in the agreement. This year's profits, exclusive of partner's interest and adjustments, are $106,087.50, while last year's profits, we are told, were $115,740.90. One-half of the combined profits for the two years, therefore, is $110,914.20. This is the amount we shall have to pay to B for good-will in addition to his credit in the capital account. This, then, is an out-and-out purchase and is recorded in about the following manner:

Good-will	$110,914.20	
B's capital account		$110,914.20

Purchased from B, who this day retired from our firm, his interest in the good-will created during the existence of the firm, the value of which interest is one-half of the profits during the past two years, as per co-partnership agreement dated............

This good-will, after being posted to his capital account (page 246) gives B a total credit of $161,208.08.

Since there is only $87,500 in cash on hand and some cash is required for working capital, it is evident that we cannot immediately pay the whole amount. An arrangement, therefore, is made, whereby he is given $25,000 in cash, the balance in four notes, bearing 5 per cent interest, the first maturing six months from date and the other three at intervals of six months thereafter, the last being for $40,208.08. The entry for this transaction is as follows:

B's capital account	$161,208.08	
Cash		$25,000.00
Notes payable		$136,208.08

Paid B $25,000.00 in cash and gave him the following notes in payment for his interest in the good-will of this firm, as stated in the previous entry:

Six months' note at 5 per cent for	$32,000.00
One year note at 5 per cent for	32,000.00
Eighteen months' note at 5 per cent for	32,000.00
Two years' note at 5 per cent for	40,208.08

B'S CAPITAL ACCOUNT.

December 31.	Interest on deficient investment..	$73.50	January 1.	Balance.....	$23,275.00
	Balance....	50,293.88	December 31.	Drawing account...	500.00
				25% of net profit.....	26,592.38
		$50,367.38			$50,367.38
	Cash......	25,000.00		Balance..............	50,293.88
	Notes payable.......	136,208.08		Good-will..............	110,914.20
		$161,208.08			$161,208.08

After these entries have been posted, we shall find that our balance sheet has been changed somewhat and that four accounts have been affected thereby. In order to

ascertain the condition of the new firm of A, C and D, at the outset, it is necessary to prepare a new balance sheet. A memorandum should also be placed in the journal, announcing the change in proprietorship.

184. *When the partnership is sold to a corporation.* —Another case of winding up a partnership affair is that in which the partnership is converted into a corporation. Suppose that the American Sales Company proposed to A, B, C and D to purchase the firm's assets at their book value after deducting the reserves, and that in payment of them the company would assume the firm's liabilities and issue to the partners stock in the American Sales Company for a sum $200,000 in excess of the net worth. This extra $200,000 would be for good-will. Suppose, further that the partners accepted the proposal, and that an agreement of purchase and sale was entered into and immediately put in operation. The basis of the calculations involved will be the balance sheet illustrated on page 238.

The following journal entries will express the transfer of the assets:

American Sales Company	$352,420.00	
Cash		$87,500.00
Notes receivable		76,000.00
Accounts receivable		122,450.00
Merchandise inventory		34,200.00
Packing materials		150.00
Land and building		25,000.00
Furniture and Fixtures		7,000.00
Insurance and premium (unexpired)		120.00

The above assets were today transferred to the American Sales Company, in accordance with the agreement of purchase and sale dated...........

The American Sales Company assumed all of our liabilities in part payment of the assets. Accordingly, we now proceed to credit the company and to charge the liability account.

Notes payable	$21,000.00	
Accounts payable	101,000.00	
Mortgage on building............	10,000.00	
The American Sales Company..		$132,000.00

In part payment for the above assets, the American Sales Company has assumed the payment of all the liabilities of the firm (see agreement of purchase and sale dated........), and is accordingly credited.

Since we have charged the Sales Company with the assets of the full book values, we must now credit the company with the reserves which were set aside and which, under the agreement, are to be deducted from the assets. Instead of deducting the reserves, however, we shall transfer them as they may be continued by the company. Hence the following entry:

Reserve for depreciation of building...	$2,360.00	
Reserve for depreciation of furniture and fixtures	1,600.00	
Reserve for bad debts	15,072.50	
The American Sales Company....		$19,032.50

In accordance with the agreement of purchase and sales dated........., American Sales Company is allowed credit for the above reserves which are assumed to be correct.

We have agreed to accept $200,000 for the firm's good-will. This is, in effect, a profit which has been accumulating, although not expressed upon our books.

This accumulated profit is $200,000, an increase of our net wealth and should be credited on the ledger in the same way that any similar increase is credited.

The American Sales Company......	$200,000.00	
Good-will		$200,000.00

The American Sales Company has agreed to pay the partners of this firm $200,000.00 for its good-will.

The net wealth of the company shown in the balance sheet is $201,387.50. Adding to this amount the good-will, we find that the American Sales Company owes us $401,387.50. The par value of the company's stock is $100 and since no fractional shares are issued, it follows that part of the payment ($87.50) must be in cash. The following entry, therefore, will close our account against the purchasing corporation:

Cash	$87.50	
The American Sales Company Stock..	401,300.00	
The American Sales Company..		$401,387.50

Received from the American Sales Company 4,013 shares of its common stock, par value $100, and $87.50 in cash in final payment of the assets of this firm which were transferred to the said company as indicated in our entry above.

The remaining entries have to do with the relations between the partners. Having disposed of their business, they are now ready to divide the remainder. The proceeds of the good-will are to be distributed among the partners upon the same basis as the profits, namely, to A 50 per cent, to B 25 per cent, to C 15 per cent and to D 10 per cent. The following entry will effect this adjustment:

Good-will	$200,000.00	
A's capital account..........		$100,000.00
B's capital account..........		50,000.00
C's capital account..........		30,000.00
D's capital account..........		20,000.00

To distribute the good-will among the partners of the firm.

We now find, however, that the partners' capital accounts are credited with uneven amounts, so that it will be impossible to divide the stock evenly. A and D, however, agree to take stock for the even amounts nearest their credits, while B and C are willing to pay in cash the difference between their credits and the next higher even amounts. A's account now stands credited with $206,364.75; B's credit is $100,293.88; C's credit is $59,489.42, and D's credit is $35,239.45. Accordingly the following stock distribution is necessary:

A's capital account..............	$206,300.00	
B's capital account..............	100,300.00	
C's capital account..............	59,500.00	
D's capital account..............	35,200.00	
The American Sales Company stock		$401,300.00

To charge each partner with his shares of the American Sales Company stock, said stock having been issued to him direct by the corporation.

The final step is simply to record the cash adjustments. When this has been done, the partnership's books will have been closed.

Cash	$16.70	
B's capital account..........		$6.12
C's capital account..........		10.58
Received from B $6.12 and from C $10.58 the amounts required to bring their balances to even amounts.		
A's capital account...............	$64.75	
D's capital account...............	39.45	
Cash		$104.20
Paid A and D final balances due to them, thus closing the remaining accounts on the ledger.		

It is hardly necessary to illustrate the effect of these entries upon the various ledger accounts. It is suggested, however, that the reader perform this operation for himself. It is surprising how clear these accounting transactions become when actually worked out.

CHAPTER XVII

CORPORATIONS

185. *Corporations and partnerships compared.*—It may safely be said that the corporation is at present the most popular form of business organization in the United States and Canada. There will probably always be some enterprises which must be conducted under the partnership form, as where the business is dependent upon the personal skill of the proprietors, or where the business is of such a nature that it has few permanent assets. The corporate form presents so many advantages over the partnership form that, in the absence of influence dictating an opposite course, business men usually elect to incorporate their business ventures.

The subject of corporations is fully discussed in Volume VIII, "Corporation Finance," but it is necessary in this place to consider it briefly so that the succeeding discussion of corporation accounting methods may be made entirely clear to the reader.

The distinguishing feature of the corporation is its permanence. Once a corporation has been brought into existence, its status is not altered in the least by the death or withdrawal of one of the proprietors—that is, one of the stockholders. A partnership, as we have seen, is automatically dissolved by the withdrawal of one of the partners, but a corporation continues until it is legally dissolved. In the partnership form of business the acts of each partner bind the whole partnership. In

the corporation, on the other hand, the corporate officers can legally perform only those duties which pertain to their respective offices.

We have seen that a change in the partnership personnel makes necessary the closing of the books of account and a general readjustment in the partners' capital accounts. Under the corporate form, a change in ownership does not affect the books of account—except where the change involves a merger or consolidation. Technically speaking, when a stockholder sells all or part of his interest in a corporation, as represented by the shares of stock issued in his name, the corporation has no interest in the transfer. The old stockholder simply instructs the corporate officers to transfer to the new owner such number of his shares as he has sold, cancelling the former's stock and issuing new certificates to the buyer. Certain corporate entries are necessary in the stock books, but not in the financial books. In a close corporation—that is, a corporation whose stock is held by relatively few men—the transfer of stock may be of interest, since the policy of the owners may be to restrict ownership to a select few. This, however, is a matter that concerns only the persons themselves and does not affect the corporate transactions.

Unlike a partner who may be held liable for all the debts of the firm, a stockholder, after having paid for his stock, is not called upon to contribute further toward the payment of the corporation's debts. The worst that can happen to a stockholder is that he may lose all the money he has paid for his stock, though in cases of reorganization stockholders are often requested to contribute additional sums, in payment for which additional stock or bonds are issued to them. But such action on the part of a stockholder is always optional. He may

decide to assist in preventing the collapse of a corporation by purchasing more of its securities, or he may refrain from doing so, just as he chooses.

Finally, the source of authority in corporate transactions lies in the action of the directors, acting under the authority delegated to them by the stockholders, the certificate of incorporation and the by-laws. In the partnership, we were guided in our financial transactions and the entries upon the books by the co-partnership agreement; in the corporation, we are guided, as just indicated, by the certificate of incorporation, the by-laws and the conclusions of the directors as recorded in the minute book or books.

186. *Legal phases of the corporation.*—It is important that the business man should be familiar with the legal phases of corporation activities—the rights, duties and liabilities of the corporation, and of the stockholders and directors. Of these we need not speak here at length as they are fully discussed in the text volumes on "Corporation Finance" and "Commercial Law." Since, however, the corporation is given its existence by the state and is constantly under state supervision, it is necessary that its accounts conform strictly with certain legal requirements. For that reason, it is necessary that we consider briefly some of the fundamental legal aspects of the corporation.

Ordinarily when three or more men have concluded to organize a corporation, they apply to the secretary of state for a certificate of incorporation to be granted under the general state statute applying to corporations or under some special statute applying to special kinds of corporation—as, for example, banks, insurance companies and the like. In some states, application for a charter must be made to the legislature. The Bay State

Gas Company, cited in Chapter II of "Corporation Finance," is an instance of such special legislative grants. The first legal consideration, then, is that a corporation has no existence until it has been recognized by the state authorities and given official permission to transact business.

A certificate of incorporation is usually prepared and submitted to the secretary of state or other designated authority for approval and signature. This certificate must contain certain specific information as explained in the text on "Corporation Finance." Part of this information is the character of the business to be transacted. The petitioners desire authority to do certain things, which are set forth in detail in the certificate. If the petition is granted, the corporation cannot thereafter perform any act not provided for in the certificate, except when certain acts may be necessary to the performance of other acts provided for in the certificate.

The certificate further sets forth the capital stock which it is proposed to issue, specifying what part is to be preferred, if any, and what part is to be common. In passing, it may be noted briefly that preferred stock entitles the holder to certain privileges such as receiving dividends before the common stockholders receive any, or in the event of dissolution, receiving their share of the corporate property before the common stockholders receive theirs. The common stock usually has voting power which ordinarily is not granted to the preferred stock. There are other features of these two classes of stock which are treated in detail in other volumes of the Modern Business text.

The point to consider here is that under the certificate, a corporation is authorized to issue a certain amount of stock of one or more kinds. It must be remembered

that under no circumstances can the corporation issue more than the authorized stock, until additional authorization, requiring further legal formalities, has been granted.

In general, the law says that the acts of a corporation are controlled by the majority of the voting stockholders, provided such acts are not illegal or beyond the scope of the authorized acts of incorporation listed in the certificate of incorporation. This applies specifically to the representatives of the majority stockholders—in other words, to the directors. The stockholders, at their first meeting, adopt a set of by-laws by which the directors must be governed. At subsequent meetings, the stockholders may instruct the directors to perform such other acts, within the scope of the corporation, as may seem advisable to them. The directors are not legally permitted to disobey either the by-laws or the subsequent instructions. In all cases of dispute not covered by the by-laws or by resolutions adopted in stockholders' or directors' meetings, the courts may decide the action to be taken, if they are appealed to in the matter.

187. *Minute books.*—Ordinarily, when a group of men decide to form a corporation, they go to their attorneys, tell them what they wish done, and the attorneys thereupon prepare the necessary certificate of incorporation. Subsequently the procedure is as follows:

A meeting of the incorporators is called at which the certificate of incorporation is approved and the directors for the first year are chosen. This latter step is necessary inasmuch as the certificate of incorporation must contain the names of the directors.

After the certificate of incorporation has been filed, there is a first meeting of the board of directors. At this meeting, the company is organized and the officers elect-

ed. The law requires that each director be notified several days in advance of the meeting and acquainted with its purpose. To avoid the delay which would thus be necessary, a waiver of notice is signed by each of the directors. This prevents any director from afterward contending that the action taken at the meeting was illegal by reason of failure to send him advance notice of the meeting.

WAIVER OF NOTICE
OF
MEETING OF DIRECTORS

We, the undersigned, being all the directors of.......... .... do hereby waive all notice whatsoever of the first meeting of the board of directors of the said company and do consent that the............. day of............., 190...., at........ o'clock in the............noon be and hereby is fixed as the time and the [1]............ office of the company, at................. in the................. of..............., New York, as the place for holding the same and that all such business be transacted thereat as may lawfully come before said meeting.

Dated the............. day of.............., 190....

[1] "Permanent" or "Temporary" as the case may be.

Immediately after the board of directors' meeting, the stockholders meet and adopt the by-laws for the company. Here, again, waivers of notice are signed unless notice has actually been issued according to the law.

In case dummy incorporators and directors were employed to avoid making public the interests behind the corporation, these dummies usually hand in formal resignations to the stockholders, and other directors are elected in their place.

If any of the directors or stockholders are unable to

attend the meeting, they designate other persons to act for them, and to this end sign what is known as a proxy. The following is an example of the proxy form:

PROXY

FOR

FIRST MEETING OF INCORPORATORS AND SUBSCRIBERS....

OF

....

Know all Men by these Presents, That I, ..., the undersigned, one of the incorporators and subscribers to the capital stock of the................ .... Company, do hereby make, constitute and appoint............................ my true and lawful attorney and proxy in my name, place and stead, to vote and cast such ballot as I may be entitled to vote or cast by reason of the.................. shares of stock in the.......... .... Company subscribed for or owned by me and to otherwise represent and act for me in my behalf at the meeting of the incorporators and subscribers of said company, to be held on the................ day of................, 190..., and to take such action at such meeting, or any adjournment thereof, and to act at such meeting as fully as I could do if personally present, with full power of substitution and revocation, hereby ratifying and confirming all that my said attorney or proxy or his substitute lawfully appointed may lawfully do by virtue hereof.

In Witness Whereof, I have hereunto set my hand and seal this.................. day of...................., 190

IN PRESENCE OF:

....

These papers, prepared by the corporation's attorneys, are retained and form the first entry in the minute book. They are neatly typewritten and as a rule pasted in the minute book, or, in some cases, placed in a loose leaf binder. Minutes of all subsequent meetings of

directors and stockholders, together with copies of notices, proxies (when not too numerous) and other important records are also written or pasted into the minute book. In some cases, one minute book is maintained for the directors' meetings and another for the stockholders' meetings.

The foregoing procedure is the one ordinarily followed when incorporating a new company. It varies, however, with the nature and size of the corporation. It is described here chiefly in order to emphasize the importance of the minute book as a source of authority in reviewing the financial transactions of a corporation. The minute book is the official record of the decisions of the board of directors and of the stockholders, and as such occupies a prominent place in the company's records. The attitude of some corporation officials who regard the keeping of the minutes as an unimportant detail and allow months to elapse without making the required entries, deserves severe censure. The authors recall instances where the minute books of corporations more than five years old were blank except for the record of the incorporation proceedings!

188. *Subscription, instalment and certificate books.* —In corporations where more than a few persons subscribe for the capital stock of the company (and, by "subscribed" is meant agreeing to take a certain number of shares) it is customary to maintain a subscription book in which all the subscriptions of stockholders are recorded. This book should contain the date of each subscription, the name and address of the subscriber and the number of shares for which he subscribed. It is thus a record of the corporation's contract with the subscriber. Where possible, the record in the subscription book is signed by the stockholder; where this is not possible a

separate subscription blank should be signed and a record kept in the subscription book. The form of the book is of no particular importance; a plain blank book serves the purpose.

Frequently the stockholders are permitted to pay for their stock in instalments. In such cases, an instalment book is usually kept, which contains the name of each subscriber, together with the amount paid on each instalment. In those cases where all the stock is issued, and where the instalments are called for on a definite date, it is customary to keep a separate record for each instalment. This enables the officers to determine quickly what subscribers have not paid first, second or other instalments.

It is the usual practice not to issue stock certificates until all the instalments have been paid. An instalment scrip book is sometimes maintained. This is a book of blank receipts to be filled out and is usually signed by the treasurer as the instalments are paid, the receipt being given to the subscriber and the stub retained. In some cases, the by-laws of a corporation provide that the president and the secretary, or the president and the treasurer sign such receipts. Upon the payment of the last instalment, the scrip is taken up and a certificate of stock issued in its place.

Every new corporation must provide itself with a stock certificate book or, as it is sometimes called, certificate book. This book contains blank stock certificates to be filled out and signed in accordance with the provision of the by-laws of the corporation, either by the secretary, president and treasurer, or by the secretary and treasurer. Usually the fee paid to the attorneys includes not only the necessary stock certificate book, but the corporate seal as well. The law requires the certifi-

cates to be numbered consecutively. A transfer form is usually printed on the reverse side in order to facilitate the transfer or sale of the stock. For a sample certificate form, see the volume on "Corporation Finance."

189. *Stock ledger.*—The stock ledger contains an account entitled capital stock, which is debited with the par value of all stock issued. It also contains an account for each stockholder, which is credited with the par value of the stock issued. When stock for any reason is transferred from one owner to another, the transferer is debited and the transferee is credited with the par value of the stock transferred. Thus, this ledger is always self-balancing and its account "capital stock" shows exactly the capital stock issued and outstanding.

The laws of most states call for the keeping of a stock book or a stock ledger which shall contain the following information: (1) names of stockholders, arranged alphabetically; (2) residence of each stockholder; (3) number of shares held by each; (4) time the stock was acquired; (5) amount paid thereon; (6) a record of all transfers showing from whom the stock was received and to whom it was transferred.

Nearly all dealers in stationery carry stock ledgers already ruled for immediate use. A form, however, is illustrated on page 264.

190. *Stock transfer book.*—The stock transactions are posted to the stock ledger from the stock transfer book. In this book, as suggested by the title, are recorded the transfers of stock. The stockholder is credited when the stock is issued to him, and debited when he transfers it to some other person, the latter being credited in turn. In some cases, the stock ledger and the stock transfer book are combined; but the laws of a number of states

WE, the persons named below, recorded owners of the Capital Stock of represented by the certificate described below, do by the undersigned Attorney, hereby sell, assign and transfer the number of Shares of said stock set opposite our respective names, to the persons indicated:

Date	Certificates Surrendered		From Whom Transferred	Ledger Folio	Certificates Issued		To Whom Transferred	Ledger Folio	Address	Signature of Attorney
	Nos.	Shares			Nos.	Shares				

require both books in some form to be kept. A suitable form is found on page 262.

On the left side of the page is recorded the transfer of the stock, while on the right, its validity is attested. The number of certificates surrendered and the number of each certificate is entered, the name of the person from whom they have been transferred and, for convenience, the folio of his account in the stock ledger is also shown. So also the certificates issued in place of the cancelled stock, the number of shares which they represent, to whom they are issued—that is, the transferee—the address of the transferee, and again the folio of his account in the stock ledger. This closes the record, except for the signature of the stockholder's attorney, authorized to make the transfer, who frequently is the secretary of the corporation.

The company may maintain several stock transfer books in the offices of its transfer agents. In New York, for example, the Guaranty Trust Company might be the transfer agent, while in Chicago some other trust company might act in the same capacity. Stockholders located in these cities would then present their certificates at these trust company offices for transfer.

191. *Other books peculiar to corporations.*—In addition to the books already described many corporations keep a dividend book or dividend record for the purpose of recording dividends declared and paid. This book contains a record of dividend, say, No. 1, with the full amount of the dividend, the number of shares held by each stockholder and the amount of the dividends paid thereon. Large corporations, in order to relieve themselves of an arduous task, frequently transfer the entire amount of the dividends to some company acting as their agent. This company in turn issues checks to all the stockholders, and receives a fee for the service.

NAME .... ADDRESS...

Date of Transfer of Shares by the Above Named	Transfer No.	To Whom Shares Are Transferred	Ledger Folio	Certificates Surrendered		Date of Acquisition of Shares	From Whom Shares Were Transferred (If original issue enter as such)	Ledger Folio	Certificates Issued		Balance Remaining Cr. of Above
				Certif. Nos.	No. Shares				Certif. Nos.	No. Shares	

INSTALMENT LEDGER

JAMES SMITH, 320 BROADWAY, NEW YORK, N. Y.

Date	Shares	How Acquired	% Unpaid	Certificate No. of Scrip.	Amount	Date	Shares Transferred	How Settled	% Unpaid	Certificate No. of Scrip	On How Many Shares Paid		%	Amount
1909						1909								
Jan. 15	100	Subscribed.....	100		$10,000.00	Feb. 1		Paid..........		1	100	1	25	$2,500.00
Mch. 1	50	F. Brown......	75	25	3750.00	Mch. 15	50	Surrendered....	75	25				3,750.00
Mch. 15	25	Reissued.......	75	26	1,875.00	Mch. 15	25	A. Peters......	75	26				1,875.00
Mch. 15	25	Reissues.......	75	27	1,875.00	April 15		Paid..........		50	125	2	25	3,125.00

At times an instalment ledger is maintained in addition to the instalment book and scrip book already described. The form of such a ledger is illustrated on page 265. It will be noted that the original subscription was made on January 15th. On that date, James Smith subscribed for one hundred shares at $100 each, making a total of $10,000, of which sum he paid nothing. On February 1st, he paid the first instalment of 25 per cent, whereupon his account in the instalment ledger was credited with that payment, and instalment scrip for the same amount issued to him.

On March 1st, S. Brown transferred to Smith his subscription for fifty shares of stock on which the first instalment had already been paid. Smith's account, therefore, is charged from the stock transfer book, and shows the unpaid amount to be $3,750. On March 15th, Smith transferred to A. Peters twenty-five shares. In order to complete that transfer, Smith surrendered the instalment scrip for fifty shares issued to him on Brown's transfer and received instead two new scrips, each for twenty-five shares, thus enabling him to give to Peters the scrips transferred. On April 15th, Smith paid the second instalment on all his subscriptions, and this was credited to his account.

By adding the shares debited on the left side of the account and subtracting from the total the shares credited on the right side, we find the number of shares on which there remains an unpaid balance. We find that Smith's susbscriptions at present are one hundred and twenty-five shares on which two instalments have already been paid. By comparing the total debits with the total credits in the money columns, we find a debit balance of $6,250, which Smith still owes. That balance represents the 50 per cent for two instalments, due on the one hundred and twenty-five shares.

CHAPTER XVIII

CORPORATE ACCOUNTS

192. *Corporate capital.*—Naturally, the differences between the corporation on the one hand and the partnership and individually owned concern on the other, which already have been noted, give rise to corresponding differences in the accounting methods employed by the two classes of business enterprise. The first distinguishing feature of the corporation is its treatment of the capital.

We say of a partnership or of a concern owned by an individual that it is worth so and so much. In speaking of the net worth or capital of a corporation, however, we mean the capital stock actually outstanding and surplus accounts. In the volume on "Economics," we learned that "capital may be defined as the sum of the machinery and materials of production," the definition applying to the material and machinery in use in the community. In accountancy, however, the word "capital" is used in a much more restricted sense. This has already been made clear in previous chapters and does not call for further comment here except to distinguish between the capital of a partnership or individually owned concern and the capital of a corporation.

We have seen that the capital of a partnership, for example, is represented by the difference between its assets and liabilities. While this is true also of the corporation the public rarely thinks of corporate capital in that way. Popularly, the corporation's capital is its

authorized capital stock, although, as a matter of fact, the authorized capital stock frequently has no relation to the financial standing of the company.

We have seen that the incorporators decide upon the amount of capital stock they desire to issue, and that they obtain authorization from the secretary of state to issue stock within the authorized amount. This amount may be determined by the present requirements, or by the necessity of providing for a contemplated future expansion; or again by the tax laws of the state; or even by arbitrary decision of these stockholders. If a radical spirit controls the corporation, we may find a capitalization of $500,000 or $1,000,000 where, with a conservative spirit prevailing the capital stock might have been $25,000 or even $10,000. Hence the amount of stock issued affords no true indication of the real values behind it. The evidence of this is found in the difference in the market prices of the stocks of corporations having the same capitalization.

The amount of stock issued, however, should always indicate the value of the property actually invested in the enterprise. Suppose a body of men decide to invest $100,000 in a new corporation and to make the authorized capital stock $500,000. How would the transaction appear upon the books of the corporation? We should have, on the one hand, a cash item of $100,000 and on the other hand, a "capital stock issue" proprietary account for $100,000. The laws of most states permit capital stock to be issued only at full or par value for cash, property or services of equal value, the board of directors being the final judges of what is the value of the contributed property. The corporation, therefore, would not legally be permitted to issue the entire $500,000 worth of stock for the $100,000 in cash. What

would become of the remaining $400,000? The corporation might issue it for a "patent," or for "services" or for other intangible value received, or it might remain dormant until the company decides to issue more stock in exchange for more property. In the latter case the difference between the capital stock issued account in the corporation and the proprietors' capital account in the partnership is merely a difference in name. This, however, applies only at the outset, for as the corporation grows, the profits are not added to the capital account but placed in a surplus account.

The balance sheet of the new corporation, at the outset, may present the facts as follows:

Cash	$100,000.00	Capital stock issued		$100,000.00
Or				
Cash	$100,000.00	Authorized capital stock	$500,000.00	
		Less capital stock unissued	400,000.00	
		Capital stock issued		$100,000.00

The second method consists in maintaining two capital stock accounts upon the company's ledger; one in which the full authorized issue is recorded as a credit, and the other to which the unissued stock is debited. This method is the better of the two in that it is clear to the public and to the directors that there is still $400,000 worth of stock that may be issued in case of need.

193. *Increase or decrease of capital stock.*—Under a partnership, the capital invested may be decreased or increased at the will of the partners themselves. Their decision in the matter does not concern the public at large. This, however, is not the case with corporations. They can increase or decrease their capital stock only by means of certain legal formalities intended to protect

the corporation's investors and creditors. For instance, under the laws of the State of New Jersey, in case of a decrease in the capital stock, a certificate of such decrease must be published once a week for three successive weeks in the county where the principal office is located. The first publication must be made within fifteen days after the certificate of reduction is filed with the Secretary of State. Failure to comply with this rule renders the directors personally liable for corporate debts contracted before compliance, and the stockholders for any amount of capital received by them under that reduction. Under the New York corporation laws, the capital stock of a corporation may be decreased or increased, either with or without a meeting, by unanimous consent of the stockholders in person or by proxy, or by a vote of a majority in interest of the stockholders, cast at a meeting specially called for that purpose. Notices of such meetings, stating the time, place, object and the amount of increase or decrease proposed, signed by the president or vice-president or secretary must be published once a week for at least two successive weeks in a local newspaper. A copy of such notice must also be mailed to the stockholders at least two weeks before the meeting, or be served on them personally at least five days before the meeting. There are also other requirements.

In the case of a decrease in the capital stock, all of the outstanding stock is called in and new certificates in amounts proportionate to the decrease are issued to the stockholders. In the case of an increase, however, the stock is held until sold in the same manner that stock is sold when the corporation is formed. Later we shall consider the accounting procedure necessary in increasing or decreasing the capital stock.

194. *Preferred and common stock.*—When only one kind of capital stock is issued, all the stockholders have equal privileges. Frequently, however, two or more kinds of stock issues are floated, as explained in the volume on "Corporation Finance." The usual division is between common and preferred.

A separate account is operated on the corporation ledger for each class of stock authorized and outstanding. It is well to show on the credit side all the authorized preferred stock, and so on, and to maintain offset accounts for the various classes of unissued stock.

195. *Bonded indebtedness.*—Frequently a corporation finds it advisable to raise funds by means of bond issues instead of through the sale of additional stock. Bonds are, in a sense, promissory notes. Indeed, they differ from notes only in that the date of the maturity is farther removed. While notes usually are for thirty, sixty or ninety days—seldom for three or four years hence, there are on the market many bond issues that do not mature until fifty or one hundred years after the date of issue. There are, however, also many bonds of shorter duration.

Most bonds are secured by liens upon corporate property. The new issues of income, or debenture bonds, which are payable out of incomes, are really in the same class with preferred stock. We cannot here describe the various classes of bonds issued; these are discussed with elaborate and interesting detail in the volumes on "Corporation Finance" and "Investment and Speculation." Suffice it to say that the security upon which bonds are based makes it possible for a corporation to secure the funds upon payment of lower interest rates than the dividends that otherwise would have to be paid to preferred or common stockholders. Moreover, the bond-

holder has no voice in the management of the corporation unless, by reason of default in the interest payment, the representatives of the bondholders are permitted to participate in managing the corporate affairs, to prevent their entering into foreclosure proceedings.

Upon the corporate financial books the outstanding bonds, as we have already seen, appear as a liability along with other obligations of the company. They constitute a fixed liability. There is, however, some question as to whether the authorized bond issue—the authorization coming from the board of directors or from the stockholders, not from the state authorities—should appear upon the ledger. Accountants who favor recording the full authorization as a liability, contend that in reality the bonds are not the liability, but that the company has issued a mortgage covering the full par value of the authorized bond issue. The mortgage constitutes the liability and therefore should be recorded in full. This is open to argument, however, since a company is liable only for the par value of the bonds that have been issued.

But there is another reason for listing the full authorized bond issue as a liability. As such it appears upon the balance sheet at all times, thereby notifying those interested that the company has authorized an issue of so many bonds of which so many are unissued and so many outstanding. There have been instances where old bond authorizations, because they were not recorded upon the financial books, were forgotten and new issues authorized.

The proceeding should be much the same in the case of bonds as in that of stock. That is, an account for authorized bonds should be credited for the full issue and an "unissued bond" account should be charged with

the unsold amount. On the balance sheet, the deduction should be shown and the outstanding bonds indicated, as illustrated in the capital stock transaction earlier in this chapter.

196. *Premiums and discounts on bonds.*—Bonds are not always sold at par. A corporation fortunate enough to have a particularly good security and an exceptionally remunerative business, may be able to sell its bonds at a premium; that is, above par. If, however, the issue is turned over to a syndicate for resale, the probability is that the bonds will be sold to the syndicate at a discount —less than par.

Let us assume that a bond issue of $100,000 is sold at 105. The premium in that case would be $5,000. The proper proceeding is to open a separate bond premium account to which this amount is credited. The entry would be:

Cash	$105,000.00	
Bonds (or unissued bonds)....		$100,000.00
Bond premium		5,000.00

This bond premium is in the nature of a revenue. The corporation has actually traded upon its excellent financial standing. The premium, however, may be due to an extraordinarily high interest rate. Whatever the case, a bond premium is regarded as being, in reality, a reduction of the full amount of interest which must be paid during the life of the bond. If, for example, the bonds were ten years at 5 per cent interest, the issuing company would have to pay during the life of the bond (disregarding compound interest calculations) the sum of $50,000. But since it received as premium $5,000, the net cost of using the funds during the ten years is in reality only $45,000. Technically, it is proper to

credit each of those ten years with its proper portion of the premium; as in that case the interest paid during the year will be a correct charge against the profit and loss for that year. To discuss in detail the necessary calculations, would lead us too far afield. The reader who desires to pursue the subject further is advised to consult C. E. Sprague's "Text Book of the Accountancy of Investment."

Conversely, when a corporation sells its bonds at a discount, it actually pays a higher charge for the use of the funds than is indicated in the nominal interest rate stated in the bonds themselves. If, in the case just cited, the bonds were sold at 95, the company would actually be paying $55,000 for the use of the bondholders' money. The extra $5,000 should be distributed among the ten years which constitute the life of the bonds in such portions that each year will bear its proper share.

197. *Surplus and undivided profits.*—We have seen that in a partnership the profits of a period are credited direct to the partners' drawing accounts or to capital account. In other words, the profits are immediately distributed among the partners. This is not the case in a corporation. There the profits are credited to a surplus account. This surplus account is open to the eyes of everybody—the investor, the financier, the legislator and the general public.

The surplus account, as may be surmised, is a credit account in which are retained from time to time the earnings from all sources that are not distributed among the stockholders. In other words, permanent increases in the net worth of the corporation find their way into the surplus account, instead of into the capital account, as is the case in the partnership form of enterprise. These increases in net wealth may come from any one of the following four sources:

1. Acquiring at time of organization property of greater value than the par value of the capital stock issued;

2. Profits arising out of the ordinary conduct of the business;

3. Increases in increment discovered during the process of revaluing the fixed property of the corporation;

4. The sale of fixed property at prices greater than the book value of such property.

It may be of interest here to consider these four classes briefly.

It occasionally happens that a new corporation, buying the business of an older one or of a partnership, acquires property of greater value than the par value of the stock issued in payment of it. It is true that close analysis may reveal excessive book values, but since the directors of a corporation are the final judges of the value of the property which they take in exchange for the company's stock, no effective protest can be made against the procedure. Obviously, to place upon the books any asset of an inflated value is open to criticism. But if the excess valuation of the property acquired is bona fide, such excess should appear upon the books and should be credited to the surplus account.

In some instances the corporation in order to create a surplus at once may issue its stock at a premium. This is especially true of banks and trust companies who in any event are required to build a surplus rapidly. This explains why in the balance sheets of financial institutions we find two surplus accounts, one called surplus and the other undivided profits. Mr. Fielder, in a lecture before the students at Harvard Graduate School of Business Administration, explained the matter thus:

Such premium, constituting, as it does, surplus of the organization, should not, however, be confused or merged with surplus arising from its operations. To that end, a surplus thus obtained should be, and it usually is, considered with reference to itself alone, and the source from which it arises. While doubtless no valid objection could be made to using such a surplus for dividend purposes, still that, strictly speaking, is not what it was designed for and, therefore, if so applied, the stockholders should clearly be informed of the source from which the dividends thus paid were drawn. It is very unusual, however, that a surplus obtained as explained is distributed in dividends prior to the formal liquidation of a company.

In view of our previous discussion of the nature of profits, we need not dwell upon the accretions to the surplus account from profits arising out of the ordinary conduct of the business. A corporation, however, has certain problems which must be solved before actual profits can be determined. Of these we shall speak later.

We have already pointed out the danger of increasing the value of fixed property upon the books of a concern, regardless of whether the appreciation is real or not. It should be stated, however, that this view is not general, although the practice among American corporations is to avoid creating surplus in this manner. Occasionally, one finds a corporation which, on the basis of its appreciated values, issues for cash new stock to its stockholders and thereupon distributes this cash in dividends, letting the fixed property represent the new stock issue. What might happen if a more conservative appraisal should show the valuation to be excessive, is a matter that probably is not given due consideration.

Commonly, when a machine or a building is sold at a price greater than its book value the surplus account

is credited with the excess. No objection can be raised against this procedure, provided a sufficient depreciation reserve has been set aside for all the other fixed property. Depreciation, as we shall see in the chapter devoted to that subject, is usually figured on groups of assets. If we take a member of such group and sell it at an advanced price, it is at least possible that the depreciation reserve for the group is thereby impaired. As a matter of conservative accounting, it would be better to add the profits on the sale to the reserve fund. But this does not apply to the sale of a large group of assets, such, for example, as one of a number of plants. Obviously, if the corporation has concluded to restrict its operations and has closed a part of its operating property, the profit on the sale of that property may properly be considered a surplus, and may as such be distributed among the stockholders.

The sale of blocks of stock in other corporations, resulting in a profit to the selling company, is similar to the case just described. If, for example, the Standard Oil Company, at the time of its dissolution, had elected to sell the stock of its subsidiary corporations, and thereby create a profit on such sale, instead of distributing it among its stockholders, it might properly have distributed among the stockholders the profit instead of the stock itself.

198. *Dividends.*—Frequent reference has been made to dividends, so the reader is familiar with the meaning of the term, and knows, at least in a general way, that a dividend is the distribution among the stockholders of all or part of the corporation's profits. There are, however, some phases of the subject of dividends which, from an accounting point of view, should be clear to the reader.

A dividend, to be absolutely legal, must be formally declared by the board of directors or issued with the consent of all the stockholders. Moreover, in most states the law provides that dividends can only be paid out of surplus.

After a dividend is formally declared and notice has been issued to the stockholders, it becomes a debt of the corporation, and is as such in the same class as other current debts.

Although it may seem at first glance an easy matter to determine what are the profits of a corporation, there are on record many cases of disputes based upon just this question. The United States Supreme Court, as far back as 1844, defined profits to be "surplus over and above the capital and debts of a corporation." Later, in 1894, the same Court held that the term "profits" out of which dividends alone can be properly paid, denotes what moneys remain after paying all expenses, including loans falling due, as well as the interest on loans.

Dividends, as stated, are usually declared as a percentage upon outstanding capital stock and each stockholder is paid according to the stock he holds. This rule is absolute.

Usually dividends are paid to the stockholders in cash. This practice, however, is not universal. Frequently it happens that a corporation accumulates a large surplus which is represented by property other than cash. In such a case, it is customary to declare a dividend payable in the stock of the company. If there is not enough unissued stock available, steps are taken to increase the authorized capital stock. But in some states, notably Massachusetts, stock dividends are prohibited by law. In such cases, the situation is relieved by declaring an

ordinary dividend which becomes a liability of the company to the stockholders. Simultaneously an offering of stock of an equal amount is made and this stock is purchased by the stockholders, their indebtedness therefor being offset by the dividends due them.

Occasionally scrip dividends, payable several years later and bearing interest, are issued instead of cash. Such scrip dividends are merely notes payable. The stockholders would undoubtedly prefer cash, but are compelled under the circumstances to take the long time scrip.

199. *Treasury stock.*—The reader will recall the previous references in this chapter to the term "unissued stock." It is a common mistake to confound unissued stock with treasury stock. But treasury stock is *not* unissued stock, and the difference should be clearly understood.

The term treasury stock, when properly used, is applied to stock which has been sold at par and is donated or given as a bonus to the company by one or more members for the purpose of increasing its working capital. Stock which is forfeited to the company by reason of the failure of a debtor to pay his debts, also becomes treasury stock. Accordingly bona fide treasury stock actually is an asset and should be so considered. To include among the corporation's assets unissued stock labeled treasury stock is misleading to say the least.

200. *Sinking, redemption and contingent funds.*—Although a separate chapter is devoted to a discussion of reserve sinking funds, for purposes of definition the subject should receive brief attention at this point. Sinking funds are more commonly found in the books of corporations and constitute an asset. They repre-

sent the actual setting aside of cash or the investment of cash in securities which, at interest, will within a definitely fixed period amount to the sum it is desired to accumulate. This sum may be for the purpose of meeting obligations at their maturity or for the purchase of some large asset.

The term redemption fund represents an amount periodically set aside out of profits which by the time a certain funded debt or other obligation matures will provide an accumulated surplus sufficient to redeem it. It is created by a charge to revenue and a credit to redemption fund account. It is practically the payment of a time loan out of revenue and is effected by charging against the profits of each year a proportion of the loan. This is usually done because the procedure is specified in the promissory document, although, as we shall see later, there is no good reason why a loan should be charged to profits.

The contingent fund represents a stated sum or a portion of the general receipts, set aside to provide for the payment of incidental expenses not anticipated or otherwise provided for. It is used especially by government institutions and social organizations. It always shows a debit balance, since it represents an accumulation of funds and is, therefore, similar to the sinking fund.

CHAPTER XIX

CORPORATE ACCOUNTING PROBLEMS

201. *Starting a new corporation.*—In Illinois, a man by the name of C. B. White, had designed a new type of gas engine fitted with a throttling device and fuel shooter. For these he secured the necessary patent rights and license to use and manufacture. Upon the advice of friends he organized under the laws of the State of Illinois a corporation to manufacture and sell the gas engine, throttling device and fuel shooter. The following are extracts from the articles of incorporation:

> The capital stock of the corporation is the sum of $150,000, of which $100,000 shall be common stock and $50,000 preferred stock.
>
> The number of shares is 1,500 of a par value of $100 each.
>
> The amount of common stock subscribed was $100,000, and of preferred stock $3,500.
>
> The amount of common stock actually paid in is the sum of $100,000, of which no dollars has been paid in cash and $100,000 has been paid in other property, an itemized description of which, with the valuation and itemization, is as follows:
>
> 1 White gas engine, re-built and fitted with White throttling device and White fuel shooter, valued at $1,000. Invention of throttling device invented by C. B. White together with license to use and manufacture throttling device, patented by C. B. White,

patent No. ——, all valued at $75,000. Detailed drawings, plans and specifications for a gas engine, planned and designed by C. B. White, valued at $24,000. The amount of preferred stock actually paid in is the sum of no dollars.

The names of the stockholders and the number of shares subscribed by each are as follows:

Name	Common	Preferred
C. B. White................	1,000	
Allen Jones		20
E. H. Hardy		10
R. S. Carroll		5

Mr. White, for the time being, transfers one share of stock to each of two employés in order that there may be three members on the board of directors. At the first meeting of the directors it is decided that, in order to facilitate the sale of the preferred stock, one share of common stock as bonus shall be issued to each purchaser of ten shares of the preferred stock. To provide enough common stock for the purpose, Mr. White has offered to give back to the company $5,000 worth of his common stock, which offer is accepted.

202. *Accounting entries explained.*—We saw in the previous chapter that the sources of information concerning corporate transactions of this nature are the certificate of incorporation, the by-laws and the minutes of stockholders' and directors' meetings. The extract from the certificate of incorporation already quoted will guide us in the initial entry which usually is a memorandum in the journal to show the organization of the corporation. The following form is suggested:

The C. B. White Company,
Incorporated under the laws of the state
of Illinois, August, 1, 19.., with an
authorized capital
of
$150,000
divided into
1,000 shares common, par value, $100 each
500 shares preferred par value $100 each.

The first transaction to record is the subscription to the stock. A stock subscription is an actual contract to which the subscriber may legally be held. If all of the common stock is subscribed, it is not necessary to open an account for common stock authorized. The only use for such an account is in case part of the stock is unsold, as explained in the previous chapter. The entry in the journal, then, may be as follows:

Common stock subscription........	$100,000.00	
Preferred stock subscription......	3,500.00	
Preferred stock unissued..........	46,500.00	
Common stock authorized.....		$100,000.00
Preferred stock authorized....		50,000.00

To record the receipt of subscriptions for all the common and 35 shares of the preferred stock of the company and to record also the unsubscribed preferred stock.

We are told in the foregoing extracts that the common stock was paid for with a gas engine valued at $1,000, and with patent rights, drawings, specifications and the like, valued at $99,000. Our next step, therefore, is to place these assets upon the books and to wipe out the common stock subscription asset, since the former can-

cels the latter. This also must be a journal entry, about as follows:

Machinery	$1,000.00	
Patent rights, drawings and specifications	99,000.00	
Common stock subscription...		$100,000.00

To record the transfer to this company of 1 White gas engine, fitted with White throttling device and White fuel shooter, valued at $1,000; patent rights license to use and manufacture throttling device, patent No. ——, valued at $75,000; detailed drawings, plans and specifications for White gas engine valued at $24,000. The assets were turned over to the company by C. B. White in payment of subscriptions to all the common stock of the company.

Had White paid cash for his stock, the entry would have been recorded on the receipt side of the cash book, crediting common stock subscriptions.

We have next to consider the $5,000 worth of common stock that was donated to the company by Mr. White and to be used as bonuses to preferred stockholders. Since it is not intended that this donation should be considered as a profit to the company, it is not available for distribution as dividends. The case would be the same if Mr. White had donated the stock for the purpose of providing working capital. The suggested entry is:

Treasury stock	$5,000.00	
Reserve for bonuses to preferred stockholders		$5,000.00

To record the receipt from C. B. White of 50 shares of common stock to be distributed to the purchasers of preferred stock—one share of common stock with a purchase of ten shares of preferred stock.

This completes the transactions as outlined in the above extracts. Suppose, now, that the subscribers to the preferred stock paid their subscriptions in cash and received the proper bonuses. The entry for the cash receipts would, of course, appear in the cash book and would be represented by the following entry in journal form:

Cash	$3,500.00	
Preferred stock subscription..		$3,500.00

Received from the subscribers to preferred stock of this company, cash payment in full.

Carroll is not entitled to a bonus until he purchases five shares more, while Jones, who purchased twenty shares of preferred, receives a bonus of two shares of common. Hardy is entitled to one share of common, having bought ten shares of preferred. We must, therefore, issue three shares of common stock valued at $300. The following journal entry will indicate the method of recording this part of the transaction:

Reserve for bonuses to preferred stockholders	$300.00	
Treasury stock		$300.00

To record the issue of three shares of treasury stock as bonuses; two shares to Allen Jones who purchased twenty shares of common stock and one share to E. H. Hardy who purchased ten shares of common.

The company sells an additional hundred shares of preferred stock to Jones for cash. In this case the credit is direct to preferred stock unissued; there is no need of transferring part of the unissued stock to stock subscription, unless the subscription comes in some time be-

fore the payment is made. This, then, would be the entry:

Cash	$10,000.00	
Preferred stock unissued......		$10,000.00
Issued 100 shares preferred stock to Allen Jones for cash.		

The bonus of ten shares issued to Jones is recorded in the manner already described.

This case presents three features which frequently confuse the business man: (1) The starting of the corporation, (2) treasury stock transactions, and (3) stock bonuses issued. The forms suggested are by no means the only forms in use, but they illustrate the principles involved, which, if understood, will enable the reader to prepare a form of entry to suit his own fancy, provided it tells the story accurately.

203. *Changing from partnership to corporation.*—Let us refer again to the balance sheet of A, B, C and D in Chapter XVI. Suppose the partners had decided to incorporate the business. Legal formality requires that the new corporation purchase the assets and in payment for them assume the liabilities as well as issue stock or bonds for the net worth. We have already seen how the partnership books are closed when the assets are purchased for cash. The proceeding is exactly the same when the business is sold for stock, regardless of whether the stockholders in the new corporation are the old partners or outside individuals. In other words, the change of the partnership into a corporation wipes out the existence of one concern at the same time that it creates another. Accordingly, the books of the partnership must be closed just as if the firm were actually going out of existence, and a new set of books for the

corporation must be opened. At times some of the books, such as customers' ledgers, creditors' ledgers and the like are continued in the new business, and to this, certainly, there is no objection. To avoid confusion, however, the general ledger should be closed and a new ledger employed. Whether or not the same blank books are retained is, after all, an unimportant matter so long as the accounts of the corporation are in proper form and distinct from the accounts of the partnership. For this, of course, the old books may be used.

It should be mentioned in passing that in closing the partnership books, accountants frequently disregard the vendee's account upon the ledger. They open what is called "an adjustment account" into which the assets and liabilities are closed. This, however, amounts to the same thing as drawing all the assets and liabilities into an account for the purchaser. The adjustment account, however, is a convenient gathering place for the correction of errors and, moreover, does not portray the exact happenings.

Let us assume, then, that the A, B, C corporation has purchased the assets of A, B, C and D and in payment has assumed all the liabilities and agreed to issue $501,-300 in stocks and to pay in cash $87.50 for the fractional amount. The extra $300,000 is for good-will. Of the stock $400,000 is to be common and the balance preferred. The company is organized under the laws of New Jersey and the authorized capital is $1,000,000—$500,000 common and $500,000 preferred, par value of each share, $100.

204. *The opening entries.*—The first step, as usual, is to place a memorandum entry in the journal which need not be given again since several illustrations of it have already appeared.

To place the stock of this company upon the books, the following journal entry may be employed:

Common stock subscription.......$400,000.00		
Common stock unissued 100,000.00		
Preferred stock subscription....... 101,300.00		
Preferred stock unissued.......... 398,700.00		
Common stock authorized....		$500,000.00
Preferred stock authorized....		500,000.00

To record the subscription of the firm of A, B, C and D for $400,000.00 of the common stock of this company and $101,300.00 of the preferred stock (see agreement of purchase and sale dates); also to record the authorization to issue the full capital stock of the company.

Our next step is to take over the assets of A, B, C and D. Obviously, the entry in the partnership books would be the same as the entry on page 247 in which the firm turned over the assets to another corporation. On the corporation books, however, the following entry is now in order:

Sundry assets $652,420.00	
A, B, C and D...............	$652,420.00

We acquire all of the assets including good-will of the firm of A, B, C and D, in accordance with the agreement of purchase and sale dated............ and recorded in the minute book, dated............

We assumed the liabilities and took over the reserves of the partnership in part payment for the above assets; hence:

A, B, C and D..................$151,032.50	
Sundry liabilities and reserves..	$151,032.50

In part payment for the assets mentioned in the previous entry, the company has agreed to assume the payment of all the liabilities of the firm of A, B, C and D and to take over the reserves at the book amounts, as per agreement of purchase and sale dated........ ...., and recorded in the minute book, dated ....

These entries are in summary form in order that the nature of the transactions may be entirely clear without the necessity of examining details. We have now only to pay the firm of A, B, C and D the difference between the assets and liabilities—that is, to issue the stock and turn over the $87.50. The following entry, then, closes the transaction between the partnership and the corporation:

A, B, C and D....................	$501,387.50	
Common stock subscription....		$400,000.00
Preferred stock subscription...		101,300.00
Cash......................		87.50

Issued to A, B, C and D, $400,000.00 worth of common stock and $101,300.00 worth of preferred stock, according to their subscriptions, and paid the firm $87.50 all in final payment of the assets turned over to this company by A, B, C and D in accordance with the agreement of purchase and sale dated.......... ...., and recorded on the minute book, dated... ....

It is necessary, however, for the corporation to place the various assets, liabilities and reserves upon its books. Occasionally it happens that the corporation before doing so re-values some of its assets. In this case the values remain the same and the following entries will be satisfactory:

Cash	$87,500.00	
Notes receivable	76,000.00	
Accounts receivable	122,450.00	
Merchandise inventory	34,200.00	
Packing materials	150.00	
Land and buildings...............	25,000.00	
Furniture and fixtures............	7,000.00	
Insurance premiums (fire)........	120.00	
Good-will	300,000.00	
Sundry assets		$652,420.00
To place upon the books of the company, in detail, the above assets acquiring from A, B, C and D.		
Sundry liabilities and reserves.....	$151,032.50	
Notes payable		$21,000.00
Accounts payable		101,000.00
Mortgage on building........		10,000.00
Reserve for depreciation of building		2,360.00
Reserve for depreciation of furniture and fixtures.........		1,600.00
Reserve for bad debts........		15,072.50
To place upon the books of the company the above liabilities and reserves taken over from A, B, C and D.		

205. *Paying for stock on instalment plan.*—Suppose a corporation has issued all its common stock and has available an authorized issue of preferred stock amounting to $100,000. Since only part of this amount is required at once and since the balance will be needed for future working capital, the company concludes to issue its preferred stock upon the instalment plan. Accordingly the stock is sold upon the following terms, 25 per cent payable upon receipt of the subscriptions, 25 per cent within three months, 25 per cent within six months, and the remainder within nine months. Each subscriber agrees that in case of his failure to pay an instalment

within thirty days after it falls due the amounts already paid will be forfeited to the company. Such an agreement is legal in some states, though not in all. Upon this basis the entire issue of preferred stock is sold.

John Smith, who has subscribed for $4,000 worth of the stock, fails to pay his second instalment when it becomes due. What entries thus become necessary upon the corporation's books?

In the opening entry, the authorized preferred stock is placed upon the books in the usual way by crediting preferred stock authorized with the full amount, and charging an account called instalment subscription to preferred stock, thus notifying the public and all interested parties that all the stock has been subscribed for. The first instalment being due when the subscription is made, the cash is entered in the cash book crediting instalment subscription account with the amount, which in this case is $25,000. When the second instalment becomes due, it is not likely that the payments will come in on the same day; in fact, some of the subscribers will probably wait until the thirty-day limit has almost expired. The corporation, however, has now a liquid asset which ranks with accounts receivable and other similar current assets. For that reason it is well to transfer the amount of the instalment due from the instalment subscription account as follows:

Preferred stock instalment No. 2. . .	$25,000.00	
Instalment subscription to preferred stock		$25,000.00
To separate from the preferred stock subscription the instalment now due.		

It may happen, and usually does, that not all the instalments are due on the same date, the subscriptions not

having been received on the same day. This does not alter the principle, however; and as each instalment No. 2 becomes due it is transferred from the subscription account to instalment No. 2 account.

As John Smith failed to pay his instalment we are required to make the following entry:

Preferred stock unsubscribed......	$3,000.00	
Treasury stock	1,000.00	
Instalment subscriptions to preferred stock		$2,000.00
Instalment to preferred stock No. 2		1,000.00
Surplus		1,000.00

John Smith failed to pay the second instalment of $1,000 upon his subscription for 40 shares of preferred stock of this company, and, in accordance with the subscription agreement, forfeited his right to the stock as well as the instalment already paid, $1,000, for the first instalment.

It must be remembered that the common practice is not to issue stock certificates until all the instalments have been paid. As explained in a previous chapter, instalment scrip is issued on receipt of the payments. Since Smith paid in $1,000, he paid for the equivalent of 10 shares fully paid; the other thirty shares are therefore unsubscribed and unissued. To show the exact condition it is necessary to show that the $3,000 worth of perferred stock is unsubscribed. The $1,000 forfeited to the company, as just stated, represents a forfeiture of 10 shares for which the company paid nothing. Hence we have a case of bona fide treasury stock explaining the charge of $1,000 to treasury stock account. When Smith paid the first instalment, it was credited along

with other first instalments direct to instalment subscriptions to preferred stock. Again, when the second instalment was placed upon the books, another $1,000 was credited to instalment subscriptions to preferred stock. Hence, there is left to the debit of this account on behalf of Smith, $2,000, representing the third and fourth instalments. This $2,000 must come out, which explains the first credit in the above entry. The second instalment still remains open in the instalment No. 2 account, since Smith has not paid it. This also must come out, which explains the credit of $1,000 to this particular account. The amount forfeited—namely, $1,000—becomes treasury stock owned by the company and is clearly a gain to the company, since it paid nothing for it. It is not a profit in the regular course of business, and therefore should not appear among the current profits. The only thing left to do is to credit it direct to surplus account. The net result is that the company owns outright $1,000 worth of its own stock which it may resell at any price it sees fit and that it has available an additional $3,000 worth of preferred stock for sale at par.

206. *Increase in capital stock.*—As corporations expand, the need for capital to finance the expansion becomes necessary. It is not always possible, nor is it always desirable, to issue bonds to raise the new capital. If the capital stock has all been issued, it may be wise to apply to the state authorities for the power to increase the authorized issue of stock. Many corporations have started with a capital stock of less than $10,000 whose capital today is a half million or more.

The accounting entries are simple. The following will place the increased issue upon the books, if no part of it has been subscribed for.

Unissued capital stock (common or preferred, as the case may be)	$100,000.00	
Capital stock (common or preferred)		$100,000.00

The company has increased its common (or preferred) stock from (say) $10,000.00 to $100,000.00 in accordance with a certificate from the Secretary of State filed in minute book, page........, and dated ....

If part of the increase is duly subscribed for an account called stock subscriptions is charged with the amount of the subscription. The balance is charged to stock unsubscribed. If all or part of it is paid in cash, the entry is placed in the cash book in the same manner as indicated in the cases of original issues.

207. *Decreasing capital stock.*—Corporations are forbidden by law, as a rule, to purchase their own capital stock, except in cases where it is necessary to take back some of this stock in payment for debts which would not otherwise be paid. Such a purchase in effect would mean the reduction of capital stock outstanding. The law attempts to protect creditors who might be defrauded through a distribution of the company's assets in this manner to the detriment of the creditors' chances of obtaining payment for amounts due them. In close corporations where there is a large surplus and where no one would be harmed, there may be no occasion for the court to interfere. The rule, nevertheless remains, hence any creditor who learns of such a purchase and fears that he will be injured thereby, may appeal to the courts to set aside the purchase. The corporation may apply to the state authorities for permission to decrease the capital stock. The latter will then determine whether such decrease may be injurious to creditors and whether

it affords a chance to defraud any individual or group of individuals. If there is found to exist a large surplus and ample capital with which to pay creditors, the necessary authority will be granted.

If an occasion arises when the corporation finds it has more capital than it needs, its directors will propose to the stockholders a decrease of the capital stock and will offer to buy back the extra stock outstanding over and above the amount that is deemed sufficient, paying for this stock in terms of other property. The entry would be:

Capital stock . . . . (paid)	$50,000.00	
Cash (or other property)		$50,000.00

The company decreased its capital stock from (say) $100,000.00 to (say) $50,000.00, purchasing for cash (or other property) from stockholders for the cancellation of 500 shares of issued stock. The certificate from the Secretary of State is filed in the minute book, dated . . . .

The stockholder turns in his stock in payment for which he will receive a smaller amount. If the smaller amount results in a fraction the stockholder is usually given the choice of paying the difference between his allotment and the next higher even amount or accepting the difference between his allotment and the next lower even amount. Decreasing the capital stock does not injure the stockholder for his smaller number of shares represents just as great a proportion of the corporation's net wealth as did the larger number. When the decrease is made to wipe out a deficit account, the entry is as simple as in the case just cited:

Deficit ....(say)	$50,000.00	
Capital stock		$50,000.00

The company decreased its capital stock from (say) $100,000.00 to (say) $50,000.00, having called in the outstanding 1,000 shares and issued in its place 500 shares in proportionate amounts to each stockholder. See certificate from Secretary of State dated....... .... and filed in minute book, page..........

208. *Assessments.*—In some states, notably California, the corporations are permitted to levy assessments upon stockholders even though the stock has been fully paid. If all the stockholders agree to an assessment, no objection will be raised, in any event, whether the law permits the assessment or not. This, however, does not apply to stock which is not yet fully paid. In such cases, the assessments really amount to instalments, differing from the latter only in the fact that the instalments are called for as they are needed—in other words, assessed—instead of being arranged in definite payments in advance. It often happens, especially in mining ventures, that stockholders pay in only part of the par value of their stock and are never called upon to pay the balance. In such a case the instalment subscription account remains upon the books indefinitely or stock dividends are issued or the capital stock is decreased.

When an assessment is levied upon stockholders who have paid the par value of their stock, it is customary to charge a stockholder's assessment account with the amount of the assessment and to credit new working capital account, surplus account, or deficit account. The first two methods apply to a solvent corporation; the last to one whose capital has been impaired.

If the company were solvent the assessment would be credited to the new working capital account or surplus. Should it later increase its capital stock, the stockholder's assessment would, of course, be regarded as part payment for the new stock. In such a case, the working capital or surplus account should be debited and the capital account credited.

CHAPTER XX

MERGERS, CONSOLIDATIONS, PARENT AND HOLDING COMPANIES

209. *Distinction between mergers and consolidations.*—Relatively few business men understand clearly the difference between a merger and a consolidation. One frequently finds persons referring to one when they mean the other or using the two terms interchangeably. In legal and financial circles there is a clean-cut distinction between the two types of corporations. The reader may examine the subject in greater detail in the volumes on "Corporation Finance" and "Commercial Law."

For the present, we need only bear in mind that a merger takes place when an *existing* corporation buys or takes over the assets and business of one or more other corporations, the latter merging their identity with that of the purchasing corporations. Consolidation, on the other hand, takes place when a *new* corporation is formed to take over the assets and businesses of two or more corporations, the identities of the latter also being lost in that of the newly organized company. In New Jersey, however, the term "consolidation" is practically synonymous with "merger." The term "combination" is generic; it may refer to a merger, consolidation, holding company or an informal agreement. Its meaning is too broad to be significant from an accounting point of view.

210. *Distinction between parent and holding companies.*—While in consolidations and mergers the plants

and other property as well as the liabilities of the merging or consolidating corporations are actually taken over, in parent and holding companies this is not the case. These merely buy the stock of the subsidiary companies in such quantities as will give them control through majority vote in the stockholders' meetings.

There is also a financial, though not a legal, distinction between a parent and a holding company that is not always understood. A parent company, for reasons which are discussed fully in "Corporation Finance," either organizes a new subsidiary corporation which is controlled through its ownership of the majority of the voting stock, or it buys the stock of all the several corporations, which thereby become its subsidiaries. The parent company, it should be noted, is itself an operating concern doing business under its own name. The subsidiary corporations also do business under their own names. A holding company, however, is not an operating company. Its principal assets are the stock of the corporations it controls through a majority ownership of the voting stock. Frequently its only other assets are cash and office equipment.

211. *Importance of these distinctions from an accountancy viewpoint.*—The legal phases of mergers, consolidations, parent and holding companies are many and complex—in fact, too intricate to warrant discussion in this volume. The proceedings in the cases of Standard Oil, Union Pacific, International Harvester, New York, New Haven and Hartford, Northern Securities and other famous corporations have given rise to much legislative activity and have provoked much newspaper agitation.

The distinction among the four types of corporations under discussion is, however, of importance from an ac-

counting point of view, since each requires a different set of accounts, either at the beginning of its existence or continuously thereafter. In mergers and consolidations, we deal with physical properties, in parent companies we deal with both properties and securities, and in holding companies we deal with securities only.

212. *A typical merger.*—The Red Head Mining Company has had a successful career and although it has not built up a large surplus, the stockholders have been made wealthy through the generous dividends that have been declared from time to time. The company was organized with a capital stock of $100,000, par value $50, all of which is outstanding. The balance sheet shows the following condition of its affairs:

ASSETS	
Cash	$9,000.00
Mine—The Red Head	100,000.00
Machinery and tools	70,000.00
Stores and supplies	2,300.00
Buildings and lumber	45,000.00
Water rights	3,000.00
Timber land	6,000.00
Amalgam and ore	8,500.00
Total assets	$243,800.00
LIABILITIES	
Accounts payable	$13,000.00
Wages due	5,000.00
Total liabilities	$18,000.00
CAPITAL AND SURPLUS	
Capital stock outstanding	$100,000.00
Surplus	125,800.00
Total capital and surplus	$225,800.00
Total Liabilities, Capital and Surplus	$243,800.00

The managers of the mine are progressive men and desire to expand the business. There are three other mining companies in the vicinity, the Bald Face, the Lady O and the KT. The Red Head company has been in communication with the managers of these other mines and in recent conferences has agreed to take over the physical properties. A combined balance sheet of the three mining companies shows their condition to be as follows:

Assets	*Bald Face*	*Lady O*	*KT*
Cash	$6,000.00	$4,300.00	$2,100.00
Mine	50,000.00	50,000.00	25,000.00
Machinery and tools	40,000.00	33,000.00	8,000.00
Stores and supplies	2,000.00	1,000.00	800.00
Buildings and lumber	1,500.00	1,500.00	1,000.00
Water rights	1,000.00	1,000.00	......
Timber land	14,000.00	......	......
Amalgam and ore	6,000.00	4,000.00	1,000.00
	$120,500.00	$94,800.00	$37,900.00
Liabilities			
Accounts payable	$18,000.00	$9,000.00	$7,000.00
Notes payable	....	5,000.00	20,000.00
Wages due	3,300.00	......	1,000.00
Mortgage on land	5,000.00	......	......
	$26,300.00	$14,000.00	$28,000.00
Capital stock issued	$75,000.00	$75,000.00	$50,000.00
Surplus or deficit	19,200.00	5,800.00	*40,100.00

The Red Head Company has agreed to pay for these properties (not including the cash) the following prices:

* Deficit.

Bald Face: $50,000 more than the net assets; $100,-000 in stock of the Red Head Company, and the remainder in cash.

Lady O: $30,000 more than the net assets; $75,000 in stock and the remainder in cash.

KT: $15,000 more than the net assets; all in stock.

In order to provide additional stock and cash to pay for the properties and to accumulate working capital sufficient to place them all in a more profitable condition, the company has applied for and received authority to increase its capital stock to $500,000. Of this amount, $150,000 has been sold at par.

As will be seen, this is a clear case of merger, and the accounting entries depend upon which side of the transaction we happen to be. We shall here illustrate the entries necessary in the case of one of the corporations to be merged—selecting for the purpose the KT Company, since this also involves the handling of a deficit in addition to the entries on the books of the purchasing corporation.

The closing entries of the KT Company do not differ materially from those on the books of A, B, C and D—the partnership we discussed in an earlier chapter. The first step is to charge the Red Head Mining Company with the assets turned over to it:

Red Head Mining Company......	$35,800.00	
KT Mine		$25,000.00
Machinery and tools.........		8,000.00
Stores and supplies..........		800.00
Building and lumber.........		1,000.00
Amalgam and ore............		1,000.00

The above assets have today been transferred to the Red Head Mining Company, in accordance with the

agreement of purchase and sale and the resolution of the stockholders recorded in the minute book, pages ....

The usual agreement in cases of mergers such as this is that the purchasing corporation assumes in part payment the liabilities of the companies that are being taken over. It states that the property is taken over and that payment is based upon the net assets. The latter contemplates the assumption of liabilities; in fact, the agreement usually specifies this.

Therefore, we must transfer the liabilities to the Red Head Company as follows:

Accounts payable	$7,000.00	
Notes payable	20,000.00	
Wages due	1,000.00	
Red Head Mining Company...		$28,000.00

The Red Head Mining Company, in part payment of the assets above enumerated, has agreed to assume the payment of the liabilities of this company. See resolution of the stockholders and agreement of purchase and sale in minute book, pages..............

There is a deficit upon the books of the KT Mining Company which, obviously, will be offset by the good-will for which the Red Head Company has agreed to pay. Technically it might be proper to open a good-will account and charge the Red Head Company, later transferring the good-will to the deficit. This, of course, is what actually happens. But there seems to be no good reason for this unnecessary amount of labor, if the transaction is clearly explained. The following entry will be just as correct:

Red Head Mining Company.......	$15,000.00	
Deficit account		$15,000.00

The Red Head Company has agreed to pay to this company $15,000.00 for its good-will and this amount has been applied to the reduction of the deficit.

The Red Head Company's account is now burdened with a debit of $22,800, which is wiped out by the receipt from that company of common stock to that amount, thereby closing the transaction.

Red Head Mining Company......	$22,800.00	
Read Head Mining Company..		$22,800.00

Received from the Red Head Mining Company 456 shares of its common stock in final payment for the assets, including good-will of this company, as per agreement of purchase and sale and resolution adopted in the stockholders' meeting held............. and recorded in the minute book, pages...............

The four accounts noted in the following entry are left upon the books of the KT Company and must be closed out.

Cash	$2,100.00	
Red Head Mining Company stock..	22,800.00	
Deficit	25,100.00	
Capital stock		$50,000.00

The final proceeding is to transfer the three debit accounts to the capital stock account, thus closing them all. The reason for this is clear; the Red Head stock is, of course, distributed among the stockholders who also receive the cash left on hand. The deficit represents the shrinkage in the stockholders' investment. They do not get back as much as they put in.

213. *Entries upon books of the purchasing corporation.*—Before the Red Head Company can enter into any of these transactions, it must have the necessary stock and cash. The first step, therefore, would be to acquire the necessary authority to increase its capital stock which, when received, goes upon the books in about the following manner:

Capital stock unsubscribed	$400,000.00	
Capital stock authorized.......		$400,000.00

This company has today received authority from the Secretary of State to increase its capital stock from $100,000.00 to $500,000.00, par value $50 per share.

The sale of $150,000 of capital stock is entered as usual on the receipt side of the cash book and credited to capital stock unsubscribed.

We now have the cash with which to buy the properties of the three mining companies and proceed as follows:

Assets	$335,800.00	
Bald Face Mining Company...		$164,500.00
Lady O Mining Company.....		120,500.00
KT Mining Company		50,800.00

This company today acquired all the assets, except cash, from the Bald Face, Lady O and KT Mining Companies, in accordance with the resolution of the stockholders at a meeting held............... and the agreement of purchase and sale entered in the minute book, pages.............

Bald Face Mining Company.......	$26,300.00
Lady O Mining Company..........	14,000.00
KT Mining Company...........	28,000.00

Sundry liabilities		$68,300.00

In part payment for the assets mentioned in the previous entry, this company has agreed to assume the payment of the liabilities of the Bald Face, Lady O and KT Mining Company, in accordance with the agreement of purchase and sale and the resolution adopted at a meeting of the stockholders held...... ...., both recorded in the minute book, pages............

Bald Face Mining Company.......	$100,000.00	
Lady O Mining Company.........	75,000.00	
KT Mining Company.............	22,800.00	
Capital stock unsubscribed....		$197,800.00

The company issued capital stock in further part payment for the assets taken over from the following companies:

Bald Face Mining Company..........	2,000 shares
Lady O Mining Company............	1,500 shares
KT Mining Company................	456 shares

We have still to pay the Bald Face and Lady O companies in cash for the balances due. These are simple cash book entries and need not be repeated here. These companies are charged, one with $38,200 and the other with $31,500, thus closing their accounts.

The Red Head Company now has upon its books, aside from the entries in the cash and capital stock accounts, two new accounts; sundry assets and sundry liabilities. It is necessary to separate these accounts into their component parts. We must remember that the company already has upon its books its own operating assets which were in existence before the merger took place. It now remains with the company to decide whether the new assets should be added to those already upon the books or whether separate accounts should be

operated so that the management will be able to keep track of the results of operation in the properties taken over, as well as in the old mine. Let us assume that the properties are to be separated; the following entry should then be made:

Bald Face Mine	$50,000.00	
" " machinery and tools	40,000.00	
" " stores and supplies	2,000.00	
" " building and lumber	1,500.00	
" " water rights	1,000.00	
" " timber land	14,000.00	
" " amalgam and ore	6,000.00	
Lady O Mine	50,000.00	
" machinery and tools	33,000.00	
" stores and supplies	1,000.00	
" building and lumber	1,500.00	
" water rights	1,000.00	
" amalgam and ore	4,000.00	
KT Mine	25,000.00	
" machinery and tools	8,000.00	
" stores and supplies	800.00	
" building and lumber	1,000.00	
" amalgam and ore	1,000.00	
Good-will	95,000.00	
Sundry assets		$335,800.00

To place upon the books of the company the assets taken over from the Bald Face, Lady O and KT Mining Companies.

There is not the same reason for separating the liabilities, although sometimes it is done for the sake of convenience. More often, however, these are included with the old liabilities, unless there is some special item which should be separately treated. Assuming that the liabilities in this case are thrown in with other liabilities of similar nature we might make the following entry:

Sundry liabilities	$68,300.00	
Accounts payable		$34,000.00
Notes payable		25,000.00
Wages due		4,300.00
Mortgage on land		5,000.00

To place upon the books the liabilities of the Bald Face, Lady O and KT Mining Companies which were assumed by this company as indicated in previous entries on this date.

In distributing the sundry accounts in this manner, it often happens that the purchasing corporation has the assets revalued and that these are found to differ from those which appear in the calculations. In such cases the usual custom is to adjust the good-will account to accord with the fluctuation. That is, if the total value of the assets is found to be less than stated, the good-will account is decreased, although at times the deduction is charged against surplus on the assumption that the good-will was figured accurately and that an error in judgment was made in determining the value of some of the other assets. If the appraisal indicates that the assets are worth more than the amounts at which they were taken, either the good-will account is increased or the excess is credited to the surplus account.

214. *A typical consolidation.*—A corporation is organized to conduct a manufacturing business with an authorized capital of $2,000,000, divided into 20,000 shares at a par value of $100, of which 15,000 shares or $1,500,000 shall be preferred stock and 5,000 shares or $500,000 common. The corporation purposes to issue $500,000 in first mortgage bonds to be used toward the purchase of a number of manufacturing concerns. The amount of capital with which the corporation begins

THE RED HEAD MINING COMPANY CONSOLIDATED—BALANCE SHEET

JANUARY 2, 19___

ASSETS	RED HEAD	BOLD FACE	LADY O	KT MINE	TOTAL
MINES	100,000.00	50,000.00	50,000.00	25,000.00	225,000.00
MACHINERY AND TOOLS	70,000.00	40,000.00	33,000.00	8,000.00	151,000.00
BUILDINGS AND LUMBER	45,000.00	1,500.00	1,500.00	1,000.00	49,000.00
TIMBER LAND	6,000.00	14,000.00	———	———	20,000.00
WATER RIGHTS	3,000.00	1,000.00	1,000.00	———	5,000.00
STORES AND SUPPLIES	2,300.00	2,000.00	1,000.00	800.00	6,100.00
AMALGAM AND ORE	8,500.00	6,000.00	4,000.00	1,000.00	19,500.00
	234,800.00	114,500.00	90,500.00	35,800.00	
CASH					89,300.00
GOOD WILL					95,000.00
TOTAL ASSETS					$659,900.00
LIABILITIES, CAPITAL AND SURPLUS					
MORTGAGE ON LAND					5,000.00
ACCOUNTS PAYABLE					47,000.00
NOTES PAYABLE					25,000.00
WAGES DUE					9,300.00
TOTAL LIABILITIES					86,300.00
CAPITAL STOCK AUTHORIZED ______ $500,000					447,800.00
UNISSUED ______ 52,200					
SURPLUS					125,800.00
					$659,900.00

business is $50,000, being the proceeds of subscriptions to 50 shares common stock and 450 shares preferred stock.

To carry out the purposes of the corporation, the real estate, water-power, machinery, good-will and the like of certain corporations have been purchased at a total appraised valuation of $2,000,000. The individual plants, not including liabilities which do not enter into the transaction, have been taken over at the following prices:

Diamond Manufacturing Company	$200,000.00
Eureka Manufacturing Company	300,000.00
Champion Manufacturing Company	500,000.00
American Manufacturing Company	600,000.00
Aetna Manufacturing Company	400,000.00

In payment for the above properties, the new corporation, which is known as the Consolidated Manufacturing Company, issues full paid stock and bonds at par on a basis of 60 per cent in preferred stock, 20 per cent in common stock and 20 per cent in bonds.

As usual, we first place the memorandum entry in the journal, announcing the incorporation of the company. This procedure, not a necessary one, is technically correct and valuable on occasions.

CONSOLIDATED MANUFACTURING COMPANY

Incorporated under the laws of the
State of ——— with an
Authorized capital of
$2,000,000

Divided into 15,000 shares of preferred and 5,000 shares of common stock, par value $100.

The company began business with $50,000, the proceeds of subscriptions to 50 shares of common stock and

450 shares of preferred stock. Here, instead of placing the full authorized capital stock upon the books, as advocated in the previous chapter, we shall follow a method which many accountants favor. Our purpose is to illustrate the procedure rather than to commend it, although it cannot be said to be wrong. The first transaction to be recorded is the subscription to stock:

Subscription to preferred stock....	$45,000.00	
Subscription to common stock....	5,000.00	
Preferred capital stock		$45,000.00
Common capital stock		5,000.00
Representing the subscription to 450 shares of preferred stock and 50 shares of common stock.		

The cash received for subscriptions is credited to the subscription accounts through the cash book.

As in the case of the merger previously discussed, we are now ready to record the receipt of the assets from the five corporations which form the consolidation:

Plant and sundry assets..........	$2,000,000.00	
Diamond Manufacturing Company		$200,000.00
Eureka Manufacturing Company		300,000.00
Champion Manufacturing Company		500,000.00
American Manufacturing Company		600,000.00
Aetna Manufacturing Company		400,000.00
For the purchase of assets, including good-will of the above mentioned companies, by this corporation in accordance with the resolution of the board of directors dated............		

Since the Consolidated Manufacturing Company does not assume any of the liabilities of the subsidiary companies, but makes full payment in stocks and bonds, our next entry is to pay off each company. This may all be done in one entry, as follows:

Diamond Manufacturing Company.	$200,000.00	
Eureka Manufacturing Company...	300,000.00	
Champion Manufacturing Company.	500,000.00	
American Manufacturing Company.	600,000.00	
Aetna Manufacturing Company....	400,000.00	
Preferred capital stock.......		$1,200,000.00
Common capital stock........		400,000.00
Consolidated mortgage bonds..		400,000.00

Payment to the above mentioned companies for the various assets purchased from them as per agreement of purchase and sale dated.............., 60 per cent in preferred capital stock, 20 per cent in common capital stock, 20 per cent in consolidated mortgage bonds.

The procedure from this point on is the same as in the case of the Red Head Mining Company. The plant and sundry asset account will be closed out and individual accounts for each asset opened. It will be seen that, since $1,245,000 of preferred stock has been issued, there remains unissued preferred stock amounting to $255,000. Likewise, the company has unsubscribed $95,000 of common stock and $100,000 of bonds. This fact will not be exhibited upon the balance sheet, unless a footnote explaining the situation is appended. This is sometimes done.

215. *Typical case of a parent company.*—The Carter-Lowe Company has met with marked success in the manufacture and sale of paint. It has been operating

with a common capital stock issue of $500,000 and has accumulated a surplus of $211,000. The directors now wish to extend the business. They desire to have a plant near the western coast and another near the eastern. Their balance sheet in condensed form is as follows:

Cash	$175,000.00	Accounts payable	$14,000.00
Accounts receivable	200,000.00	Notes payable	180,000.00
Inventories	125,000.00	Capital stock	500,000.00
Plant and machinery	400,000.00	Surplus	211,000.00
Furniture and fixtures	5,000.00		
	$905,000.00		$905,000.00

In order to provide means for expansion, the directors have authorized an issue of preferred stock of $1,000,000 and an authorized first mortgage bond issue of $500,000.

They immedately enter into negotiations with the Brabant Paint Company of California which has a common stock issue of $250,000, and with the Lorney Paint and Varnish Company with a common stock issue outstanding of $100,000. The negotiations are satisfactory and the Carter-Lowe Company agrees to purchase the stock of the two companies. The Brabant stock is purchased at 125 in payment for which the company issues $200,000 in bonds and $112,500 in preferred stock. The Lorney stock is bought in at 150 and is paid for with preferred stock. It is not necessary to repeat here the necessary entries for the increase of the capital stock and the creation of the authorized bond issue. The question now is: How shall the purchase of the Brabant and the Lorney Companies be recorded?

While, of course, the purchase of all the stock of these two companies in effect amounts to the purchase of the companies themselves, the fact remains that this is not what actually happens. The two companies re-

tain their separate identities, carry on business under their own names and operate with separate organizations. The Carter-Lowe Company is a parent company controlling these subsidiaries and upon its books only the stock purchases are recorded. The entries are simple.

Brabant Paint Company stock.....	$312,500.00	
First mortgage bonds		$200,000.00
Preferred stock		112,500.00

This company purchased 2,500 shares, this being all the capital stock, of the Brabant Paint Company of California, in payment for which it issued first mortgage bonds in the amount of $200,000.00 and preferred stock in the amount of $112,500.00, in accordance with the resolution of the board of directors dated............ and recorded in the minute book, page...........

Lorney Paint and Varnish Company stock	$150,000.00	
Preferred stock		$150,000.00

This company today purchased 1,000 shares, this being all the capital stock, of the Lorney Paint and Varnish Company, New Jersey, at 150, in payment of which it issued preferred stock to the amount of $150,000.00.

It will be noted that the stock of the Brabant and Lorney Companies is placed upon the books at the prices paid for them. This is proper, since these prices undoubtedly represent the actual value of the stock purchased.

Later the company concludes to operate separate sales corporations, one in the northwest, another in the south,

and still another in New England. Accordingly, it organizes the New England Paint Sales Company of Massachusetts, the Southern States Sales Company of Georgia and the Oregon Paint and Varnish Sales Company of Oregon, each with a common stock issue of $20,000. The company actually has paid for this stock in cash, thereby affording each company working capital with which to organize its own force and conduct its own operations, under the necessary control of the home office.

Very probably, the cash paid for the sales companies' stocks was advanced at first in small amounts, as circumstances requiring temporary cash arose. Later a transfer was made to separate accounts headed New England Sales Company Stock, Southern Sales Company Stock, etc. Any money paid direct for this stock would, of course, be entered in the cash book and charged to the stock accounts.

The official balance sheet of the company after these transactions are recorded would show the following condition:

Assets.		Liabilities.	
Cash	$115,000.00	Accounts payable	$14,000.00
Accounts receivable	200,000.00	Notes payable	180,000.00
Inventories	125,000.00	First mortgage bonds	200,000.00
Plant and machinery	400,000.00	(Unissued $300,000.00)	
Furniture and fixtures	5,000.00	Common stock	500,000.00
Brabant Company stock	312,500.00	Preferred stock	262,500.00
Lorney Paint Company stock	150,000.00	(Unissued $737,500.00.)	
		Surplus	211,000.00
New England Paint Sales Company stock	20,000.00		
Southern Paint Sales Company stock	20,000.00		
Oregon Paint and Varnish Sales Company stock	20,000.00		
	$1,367,500.00		$1,367,500.00

As already explained in the case of the consolidation, it is advisable to prepare another balance sheet in which

the physical property of the subsidiary companies are included with the physical properties of the parent company, since, after all, these businesses belong to one group of investors who are not interested in the technical details of accounting. Their interest lies in the condition of the properties represented by their investment.

216. *The holding companies.*—If the Carter-Lowe Company instead of operating its own paint manufacturing establishment, merely purchased the stock of these five corporations in order to control them, and if the stock of the holding companies were owned by the officers of the subsidiary companies, we should have a clear case of a holding company. The accounting entries, so far as the taking over of the stock of the subsidiary companies is concerned are exactly the same as those just illustrated. The only difference between the two is that in the official balance sheet of the latter, such items as cash, plant and machinery, accounts receivable and the like are missing. The holding company's assets would consist almost entirely of the stock of the two paint manufacturing companies and the three paint sales companies. It might not even possess office fixtures, since its official office may be the office of one of the subsidiary companies.

CHAPTER XXI

TRADING COMPANY ACCOUNTS

217. *Distinctive features.*—In Chapters XII-XIV we have already examined the accounts of a trading company. The hat business there discussed was without complications of any sort. It might be well now to examine briefly the principles underlying the systems in use by the larger trading companies, of which Marshall Field and Company of Chicago, the large department stores in New York and the many manufacturers' commission agents are good examples.

The prominent feature of the trading company is that which constitutes the difference between a trading and a manufacturing company, namely, the complete absence of a manufacturing or operating department. The buyer in this case takes the place of the manufacturing superintendent.

Generally speaking, the big departments in a trading company are the buying, selling and credit departments. The accounting system must be arranged to provide these three important departments with all necessary information in order that they may be able to carry on their activities intelligently. If the reader has visited the offices of one of the large department stores he will have some idea of the amount of labor necessary. This involves the sub-division into minute parts of nearly all the accounting records. The entries are made in the first instance by clerks with the aid of machines of various kinds. The accounting work con-

sists chiefly in planning the system and in gathering and correlating into the books and reports the details which hundreds of clerks are busily recording day after day. These summary reports, however, do not differ essentially from those already discussed. The general ledger of a mammoth department store or wholesale establishment differs from the ordinary general ledger chiefly in the number of accounts carried. The profit and loss statements and the balance sheet also are the same in principle; they merely present a larger number of accounts and involve larger amounts.

The accounting system depends largely, of course, upon the nature and size of the enterprise. The mechanism in a large retail department store will differ from that in a wholesale hat establishment. Some of the fundamental features in the business of these huge establishments, call for a brief discussion.

218. *Departmentizing.*—In Albert Brown's case, as the reader recalls, the product consisted of several kinds of hats, the sales and the purchases of which were separated. In a large retail establishment there may be dozens of departments which are divided into main groups, each of which has its separate set of books for purchases, sales and expenses. These, in turn, are so arranged as to show the operation of each department within the group. Such subdivision not only prevents confusion, but enables the management to organize its clerical force more efficiently. The final results of the departments and groups are shown in an elaborate comparative profit and loss statement and balance sheet, on the same plan as the profit and loss statements on page 207, though upon a larger scale.

219. *Sales and selling systems.*—The entire accounting system of a large trading company rests upon three

chief elements, namely, the sales, the returns and the cash. The introduction of billing machines, cash registers, internal carriers, loose leaf binders and card systems, has greatly facilitated the handling of the details pertaining to the foregoing trio. Indeed, without them it would be extremely difficult to manage successfully our large trading and manufacturing establishments.

The reader may, or he may not, have considered the importance of the sales check given him by the department store clerk. This sales check, or its carbon copy which is sent in a carrier to the cashier's division, constitutes a "book of original entry." The purchaser is given this sales check for three reasons: first, so that he may have a means of checking the bill when it is rendered; second, so that he may have an official copy in case of dispute; and third, in order that he may enable the store authorities to locate a sale quickly should there be a delay in delivery, or should the wrong articles have been sent, or in case of shortage, etc. These sales slips, as just mentioned, go to the cashier's division, where the cash slips are separated and the charge slips placed on long spindles. The total of the cash slips, at the end of the day, when added to the cash on hand at the beginning of the day, must equal the cash on hand.

The slips then go to the bookkeeping department where they are entered in the various sales books. There may in turn be several sets of sales books, one for each department, a set for cash sales and a set for charge sales, etc. Or there may be only a few sales books in which the total sales for the day are entered, the charges being made by means of a billing machine on which the customer's bill and his ledger account are written up from day to day—the ledger account being a copy of the bill. At the end of the month, it is necessary only

to fill in in ink the totals of the bill and of the account and to send the bill to the customer—a method far superior to the old one of making up the bill from the ledger accounts, since it saves a great deal of labor and insures the prompt sending out of the invoices. Under the old method in a large establishment several weeks might elapse before the bills were ready for mailing.

The balancing feature observed in the set of accounts illustrated in Chapters XII-XIV—is not altogether absent, although the postings are not as there made from a sales book. The sales book entries are made in total direct from the sales slips, by "running up" the amounts of the slips on adding machines. The bills are also made up from the individual sales slips, and since the ledger account is simply a copy of the bill this applies also to the ledger entry. The total charges appearing in the sales books, then, should equal the total charges in the customer ledgers. It is necessary to assort the slips twice, first according to the sale book groupings and second alphabetically or numerically, according to the customers. This involves finding the total charges for the month or week in two different ways and thus serves as a check upon the accuracy of the postings. These comparisons are made frequently—in some cases, every day—thereby reducing as much as possible the number of slips that would have to be re-examined in case of a discrepancy.

The possibilities of eliminating postings by means of the billing machine, are numerous. In some cases, the customer's invoice, the bill of lading, the packing slip which goes into the case with the goods, the sales book entries and the ledger charge are prepared at one writing by the use of carbon paper inserted between the sheets. The companies manufacturing such machines

usually maintain fully equipped service departments which are ready to assist the business man in framing a "bill and charge" system to meet his particular needs.

The accountant finds these manifolding typewriters decidedly useful in preparing statistical records at the same time that the financial records are made. "The National Cash Register Company in one writing fills in acknowledgments to the agent and to the customer, order to the factory, a notice to the traffic department, two notices to the treasurer's department, two copies of the order for the order department for permanent record and follow-up, a notice to the agent advising him of credit of commission, a notice to the accounting department to credit the agent with commission, and a ledger sheet for the customer." [1]

220. *Handling cash receipts.*—In the majority of business houses, cash payments are made by check, and the old method of entering each check in the cash book is still being followed. Indeed, very often this method is superior to any other. In some of the large institutions, however, where a number of cashiers are required to handle incoming receipts, it is found necessary to maintain separate cash sheets. It is extremely inconvenient if not actually impossible to employ books large enough for the purpose. These sheets, as explained in a previous chapter, are the books of original entry and are afterward bound and locked into binders and turned over to the ledger clerks. In some cases, especially in some of the large instalment houses where each account is given a number and is filed in numerical order in the ledger, it is advisable to employ an office cash register which automatically adds the various kinds of cash receipts and prints upon a slip the number of the account

[1] "The American Office," by J. William Schulze.

and the amount received, as well as the initials or designating letter or number of the cashier. This mechanism is an ingenious device capable of reducing to a considerable extent the routine labor and of supplying quickly information which otherwise it might require much time and labor to compile.

221. *Handling returns.*—In trading establishments there usually are numerous returns of goods, allowances for damage, and the like. These, as we have seen, constitute credits to the customers' accounts and are handled much the same as sales except in reverse order. In the large retail department stores, an elaborate system is necessary. The average woman in the larger cities will order anything that suits her fancy, knowing full well that she is at liberty to return it if upon leisurely examination in her own home she concludes that she does not want it. In order properly to handle these returns it is necessary to employ methods as careful and painstaking as methods of recording sales. Return slips, usually distinguished from sales slips by their color, are made out in the various sales departments, checked by the receiving departments and entered in the bookkeeping department in much the same way as the sales are entered. If a system of preparing the bill and the ledger account daily, such as already described, is in use, these returns and allowances are entered upon the bill in a separate credit column in red ink.

222. *The ledger.*—In business houses dealing with thousands of customers, it is necessary as we have seen, to subdivide the ledgers so that a large force of clerks may be posting sales, returns or cash receipts, as the case may be, at the same time without confusion. To facilitate this work, the entries in subsidiary books, where subsidiary records are the mediums of posting,

are grouped according to the ledger. That is to say, for example, on the cash received sheet, all the receipts for ledger No. 1 will follow each other along the left hand margin; the entries for ledger No. 2 will form another group slightly indented, and so on. In addition, the separation of the amounts in the various columns further facilitate the finding of the proper entries for each ledger. These, however, are details which readily suggest themselves to the business man if the basis of the accounting methods is correct.

The chief difference between a set of accounts suited to the needs of a large trading company and that used by a smaller one, such as Albert Brown's wholesale establishment, is one of amplification. The larger trader will operate several sets of customers' ledgers whereas the small trader may operate but one. The larger trader may post direct from sales ticket to ledger accounts, whereas the small trader may post from the sales book direct. The larger trader may find use for a number of mechanical office devices for which there may not be enough work in the smaller office. Nevertheless, it behooves the proprietor of a smaller business to familiarize himself with the methods of the larger, as these methods indicate the line of progress to be followed as his business expands. Some of these methods might with profit be adopted for occasional use even at the present time.

223. *Branch office accounting.*—The establishment of branch offices by many of the national organizations gives rise to accounting problems not usually explained in books on this subject. Since primarily the branch office is a sales office and part of the trading organization, even in the case of a manufacturing concern, we shall here discuss briefly some of its distinctive features.

The branch office is the field representative of the con-

cern, and upon the accuracy and completeness of the information it renders depends to a very large extent the policy which the administration must adopt. Hence the importance of branch office records and reports.

224. *Summary report methods.*—The most common of such records is the summary report method. Each branch is a separate accounting unit. Each keeps the usual sales book, cash book, journal and ledgers. In the general ledger is an account with the home office, just as there is a corresponding account in the home office books for each of the branches. As goods are shipped to the branches it is charged against them at an arranged branch price, and when received at the branches it is credited to home office at that price. Shipments in transit appear as differences to be adjusted at the end of each month before final closing.

Promptly at the close of each month the following reports are required from each branch: (1) report of sales for month; (2) summary report of collections (details having been sent in from day to day as memoranda to the treasurer); (3) report of cash expenditures; (4) report of goods on hand (inventories); (5) trial balance of ledgers and reports of accounts overdue. These reports are received at the home office usually about the tenth of the month. The sales report shows the amount of business done; just as the report of cash expenditures gives other essential information. The inventories are checked by adding to the old inventories each shipment to the branches and deducting the sales; and a rush is made to crystallize each of the many reports into journal entries for the home office books.

For a number of years one of the large computing machine companies used the summary report method. It had been started a long time ago when there were only

three branches, and as the business grew and the field extended, new branches had to be added. But each additional branch increased the confusion and delay in closing the home office books, and eventually the situation became desperate. When the condition was finally realized, and it was decided to adopt the centralized accounting method, which is explained later in this chapter, it was necessary to employ a large corps of expert accountants to bring the records of the numerous branches up to date for a fresh start. The summarized statement works well enough for certain kinds of business with not more than six branches, but it is too cumbersome and involves too much delay to be of use with a larger number of branches, or in a business where collections must be watched closely.

225. *Detailed daily reports.*—When the detailed daily report is used, each branch keeps a complete set of books as before, but instead of reporting only once a month, each branch reports daily a summary of its transactions. The sales book is written in duplicate and the copy is sent to the home office. The same is true of the cash receipts, the petty cash expenditures and the journal. The journal contains all adjustments, return sales, exchanges and the like, and also credits home office and charges stock account with goods received from the factory.

The home office keeps a duplicate set of books for each branch, written from the copies of the branch transactions. There are advantages in this method that offset the obvious criticism that it is double work. One of these advantages is that shortly after the end of the month the books can be closed and quickly checked with simple trial balances sent in from the branches. Another is that the home office can follow sales and collec-

tions daily throughout the month, while the production department can trace delayed shipments promptly.

A further advantage not to be overlooked was brought out vividly by the following incident. A branch office at New Orleans was burned to the ground one night within two days of the end of the month. All the stock was destroyed and the records ruined. With the summary report method in use it would have been impossible to reconstruct the accounts and collect many of the accounts receivable. But with a duplicate set of records in New York, the matter was simple. By noon of the same day the news was received, an auditor was started on his way South with a complete new set of books written up to within four days of the fire, while a fresh stock of goods was being rushed to New Orleans from nearby branches. As the reports that had been in transit were received, copies were returned to New Orleans, and within a week everything moved as smoothly as if nothing untoward had happened. That many thousands of dollars of accounts were saved in that way is beyond doubt.

226. *Centralized accounting method.*—This method is a development of the daily report method and is free from some of the objections sometimes made to the latter. Its main features are:

Branches keep no financial accounts with the home office, and no impersonal accounts of any nature.

Each branch keeps a ledger of customers' accounts, single entry, to assist them in making collections.

Each branch reports its transactions on prescribed forms, ruled and punched to assemble into uniform permanent books of record at the home office.

All property records with branches are physical records and carry no valuation in dollars. That is, an

adding machine company, for instance, would have at its branch so many Model 10 machines, so many Model 15, and so many stands. A furniture company's branch records would show so many 15-A desks, so many No. 10 tables, so many 23-Back chairs. When the factory ships goods, it ships so many units of this and so many units of that, and the branch charges its stock with them as units; when it sells some of them, it posts from its sales sheet to the property records the number of units sold and disregards the valuation. Finally, deducting the number sold from the number received, the branch reports that it has so many units on hand at the end of the month.

227. *Centralized accounting in operation.*—A simple statement of its features, however, is not an exposition of the method itself. Perhaps this can best be explained by studying the progress of an imaginary product from the time of its shipment from the factory to its final delivery to the customer. To simplify terms and descriptions, let us take some definite product—for example, a typewriter. Let us place our factory in Chicago, our home office in New York and fifty or sixty branches in principal cities throughout the country.

The branch bookkeepers, under this system, are responsible to the home office and not to local managers. The branch managers are under direct supervision of the sales manager, and no manager or salesman has access to any branch records. The traveling auditors employed, who are responsible only to the controller, have sufficient authority to enforce this rule in all cases.

St. Louis, let us say, wants 45 machines—10 No. 48 and the remainder No. 5S. An order in triplicate is made out, of which two copies are sent to the home office and the third kept on file at the branch. The home

office files one copy and sends the other to the factory to be filled. When the machines are shipped (directly to St. Louis from the factory), the shipping date is stamped on the factory copy and the latter returned to New York. There the shipping date is noted on the home office copy of the order and the stamped copy sent on to the branch as notification that the machines may be expected very soon. Thus with one writing we have prepared the executive order for the factory, have supplied the necessary information to the home office production department, and have informed the branch that shipment is made.

The machines arrive at the branch, freight charges collect. If this amount is small, the branch pays the railroad in cash, or it attaches the invoice to the voucher form when properly certified by the local manager and the local bookkeeper, and sends it to the home office to be paid direct by the treasurer. The best practice is to pay out as little money as possible at the branches, and to arrange that most bills be paid by treasurer's check from the home office. The machines having been received into stock, a simple statement to that effect is made on the day's journal form. "Received today 10 No. 4 machines, Nos. 711,483, 711,485, 711,488, etc., etc., and 35 No. 5 machines, Nos. 283,486, 283,487, etc., etc.........." In the typewriter business each machine is known individually by number. A separate card is therefore made out for each machine received, and is placed in the stock file. The total number of machines received is then added to inventory of machines of each model on hand.

Five machines are sent to A. B. and Company for examination. The cards are marked to show that fact and are transferred to the examination file, but no re-

port is made to New York. When the sale is made, and the order is duly signed by the purchaser and approved as to terms and credit by the local manager, the transaction is entered on the sales sheet for that day; the original is sent to the home office and the copy placed on file. From this copy the branch bookkeeper duly enters the sale in the customers' ledger against A. B. and Company. Attached to the sales sheet that goes to the home office must be the original signed order. In case a machine is sent out on rental, the first month's rent is shown on the sales sheet. The rental agreement must accompany the sheet.

If for any reason one machine is exchanged for another at even exchange, the fact is recorded in a simple statement on the journal report. Other machines taken in part payment must, however, be shown in the terms of the original sale. Any change in terms should be authorized by the general sales manager and approved by the local manager on a form provided for that purpose, and when the authorization has been made the journal report should show a simple statement of the fact and be accompanied by the duly signed form. If the entry when received at New York is incomplete or lacks authorization it is dangerous to leave it on the books and try to straighten out the matter by correspondence with the branch. The only proper action to take, is to cancel the entry at once and return whatever papers accompanied it to the branch with instructions to originate the entry again when it is complete.

A typewriter company has three classes of charge customers: open-account, lease and rental. The lease customers are those who buy on long time, agreeing to pay 10 per cent or more a month. All sales reports should show to which class the customer belongs. That

is equally true of the cash receipts report. The latter is in the form of a running record of collections, the footings being carried forward from day to day as in a bound cash book. It, too, is made in duplicate. From the branch copy the various payments recorded are posted to the customer's ledger. The total collections for the day must be deposited in bank, and a duplicate deposit slip, stamped by the bank, attached to the cash report.

A petty cash report is made up about once a week. With it are sent to the home office the receipts for all expenditures except carfare. The treasurer sends a check in return to reimburse the petty cash fund for the amounts paid out. It is the usual impressed cash system, reported weekly.

228. *At the home office.*—Let us now view the transactions from the home office point of view. The reports from the branches serve as records of original entry. A complete set of books is kept with each branch, the work usually being done by girls, of whom each becomes expert in some detail of the work. Every morning a large basketful of reports is received from all over the country. The first operation is to see that all entries are supported by properly signed authorization forms. Such forms are sales orders, rental contracts, duplicate deposit slips, receipts for cash expenditures, leases and change of term blanks. Regardless of what branches they have come from the reports are then separated into piles of sales reports, journals, cash receipts and petty cash expenditures. If the sales reports have passed the censor, they are ready for journalizing. The same is true of both kinds of cash reports. The journal reports, however, are handled somewhat differently.

Sales reports, instead of being journalized separately,

are recapitulated daily on a sheet ruled to contain just one month's business. The recapitulation affords such information as number of machines sold and total selling price, lease (instalment sales) and rental business, supplies, repairs, etc., and also the amount of commission paid to salesmen. These recapitulation sheets contain a single line for each day, and there is one sheet for each branch. As the sales sheets are summarized they are passed on to posting clerks who post each sale against the customer and post the commission to the credit of the salesman. At the end of the month the recapitulation totals are journalized and the entries posted in the branch books in the usual way. Whenever a journal report has an entry affecting the home office account it is sent, after posting, to the home office bookkeepers so that a corresponding entry can be made in the general books.

Cash receipts reports are posted to the various accounts in the branch books, and are summarized much as are the sales reports, so that at the end of the month one entry will suffice for each branch's cash transactions.

The handling of the branch journal reports is the only non-mechanical work of the home office branch-bookkeepers. The journal report is divided about in the middle by a heavy line, and the branch must write only on the upper portion of the sheet. Below the line there is the usual journal ruling and this portion is reserved for home office use. The purpose of this sheet is to insure that all journalizing shall be done at New York. This makes it possible to use in the branch offices intelligent girls without technical training, and it insures that all entries will be made correctly and uniformly. Uniformity of reports is absolutely necessary where there are from five to ten thousand postings a day. The

branch journal report, it will be recalled, is received without valuations. The entries are simply statements of what has taken place. The home office journalizers make of each statement a journal entry on the lower portion of the journal report. "We have received today 10 No. 4 machines and 35 No. 5 machines, and 4 No. 15-A desks" reports the branch. After being passed to the bookkeepers the entry looks as follows:

No. 4 machines (10)	$800.00	
No. 5 machines (35)	2,975.00	
Furniture (s 15-A D)	100.00	
Home office		$3,875.00

As this affects the home office, it must be sent after posting to the general bookkeepers, who charge St. Louis Branch with $3,875 and credit the machine and furniture accounts.

When an entry affecting property accounts (such as the foregoing) is posted to the branch ledger, the details are entered upon a physical property sheet similar to those kept at the branches, except that in addition to the number of units, the valuation also is shown. At the end of the month each branch sends in a duplicate copy of its physical property record sheet (showing units only) which must agree with the report kept at New York. Each also sends in a trial balance of its customers' ledger, which is compared with the trial balances submitted by the home office branch-bookkeepers.

In order not to have to wait at the end of the month for reports in transit from distant branches, it has been found best to close such branch books a few days before the thirtieth. San Francisco's month, for instance, runs from the 25th to the 25th, New Orleans' from the 28th to

the 28th, etc. Five days is usually the time allowed after the close of the month, in which to do all closing and checking. On the sixth the general books are finally closed, and the directors' reports are ready by the ninth or tenth. That is an accomplishment that has been made possible only through the perfection of the centralized accounting method, and is a strong argument in its favor.

229. *Condensed reports to departments.*—The report to the production department contains the number of machines sold by branches, and a comparison of these sales with the estimate. To the sales department go the daily sales reports after they have been posted. From these reports information is obtained with regard to volume of sales, terms, salesmen and commission, together with all data relating to each sale. Furthermore, a report is furnished monthly showing the total commission and salary earned by each man, together with the amount he has drawn and the balance due. This is made up from the salesmen's accounts in the branch ledgers. The treasurer is furnished daily with reports of funds deposited by each branch (the duplicate deposit slips), and at the end of the month with a report of the daily collections of each branch, which he uses to check his daily reports. When vouchers come in from the branches for payment they are noted as usual on the journal report and duly journalized by the home office, after which they are turned over to the treasurer. The latter may use his discretion as to whether to pay them and take the cash discounts, or to reserve his funds. Although mentioned casually, this is an important feature in the plan from the financial manager's point of view.

230. *Controlling accounts.*—The general accounts

are kept as usual, and a controlling ledger contains accounts with each branch, the balances of which must agree with the home office balances in the individual branch ledgers. The figure at which property is charged to branches is so arranged that the margin between it and the selling price is just sufficient to cover the cost of conducting the branch. The profit or the loss showing in a branch's books is therefore a good index of the relative efficiency of that branch. Of course, the difference between the branch price and the cost of manufacture is shown in the general books only. The small profit or loss of the branches is either adjusted monthly or left for six months or a year.

CHAPTER XXII

MANUFACTURING ACCOUNTS

231. *Manufacturing accounts distinguished from trading accounts.*—In the early days when a manufacturer's establishment was under his own personal supervision, he could, with a reasonable degree of accuracy, determine the selling price per unit of his product that would afford a sufficient profit. He did not require an elaborate system of cost accounting, or even manufacturing accounts, to calculate costs and selling prices. It was not necessary for him to figure so closely as the manufacturers of today must figure; consumers were not so exacting and competition was not so keen. But large-scale production has changed this condition. Moreover, buying has become much more scientific. Today a buyer will send material to a laboratory for analysis, before he accepts it; and no detail of the specifications escapes his scrutiny. Notwithstanding the trade combinations that have sprung up, competition is keener by far than it was during the days of our fathers.

The wide-awake executive recognizes the value of arousing the competitive instinct of his own employés, and if he does not pit them against outsiders he pits them against one another. In this way he stimulates creative ability, cuts costs and prevents his employés from falling into a rut—a condition likely to develop in large establishments where direct personal supervision must give way to the more indirect form of management.

The corollary to this is that the employés themselves—whether plant managers, department heads or assistants—stand or fall according to the parts they play in improving the product or its sale, in eliminating waste or improving processes, in reducing costs, etc. Unfortunately, however, this statement is not always correct. It would be nearer the truth to say that these employés stand or fall according to the record of their work. If the records are not accurate one employé may be unduly benefited and another injured.

Accordingly, business men have found it necessary to pay more attention to manufacturing accounts and manufacturing costs not only as a measure of protection against competitors, but as a means of framing and introducing more aggressive policies.

What has so far been said as to trading accounts, in general applies also to manufacturing accounts. In the latter, however, we have an additional element to deal with. In considering trading accounts, it was found necessary to arrive at the cost of sales as against the proceeds of the sales, in order to find the true relation between the two. We may recall that the profit and loss statement began with the section headed "Cost of Goods Sold," and that in this section appeared only the inventories, purchases and charges incidental to the purchasing of goods. In the manufacturing accounts, "the cost of goods sold" entails a complete set of accounts, preceding this particular section. In other words, it is the duty of the manufacturing accounts to show what is "the cost of the goods" and how this cost is made up.

232. *Purposes of a manufacturing concern.*—A manufacturer's functions are two-fold: to manufacture and to sell. He may manufacture for the purpose of obtaining the manufacturer's profits—being able to manufac-

ture more cheaply than he can buy; or he may manufacture for the purpose of maintaining a certain quality in the goods, or for various other reasons. Obviously, he is expected to have determined with accuracy whether it is more profitable to buy in the open market than to manufacture the goods himself. It is necessary, therefore, that he keep the two branches of his business—the result of manufacturing and the result of trading—separate.

But the manufacturer is not only interested in determining whether he is manufacturing his goods more cheaply than he can buy them outside. He should be able to determine from his records whether it is possible for him still further to reduce costs; whether, if he deals in a number of different products, any are being manufactured at too high a cost, in order that he may eliminate them as unprofitable. He should also be able to determine which departments in his manufacturing establishment are efficient and which are not. The manufacturing accounts are of great value in providing this and other similar information. The cost accounts are of even greater value, since they present in detail, records of costs in each department, on each lot of goods, or even on each piece manufactured.

233. *Continuous process production.*—In some cases, however, detailed cost accounts are not necessary or, in fact, possible. Take a large paper mill manufacturing one distinct kind of paper which is put through in mass. The mill is constantly working upon this one grade paper which goes through in large batches. This is an example of continuous process which Professor Kimball discusses in greater detail in Volume VII. In such a case the manufacturing accounts in the general books are relied upon for all the necessary details of costs.

COST ACCOUNTS OF THE BLANK MANUFACTURING COMPANY

Raw Materials.

Inventory at commencement	$15,621.42	Manufacturing account, being amount of requisitions for consumption	$79,820.34
Purchases during period	80,416.45	Balance carried down	16,217.53
	$96,037.87		$96,037.87
Balance	$16,217.53		

Factory Pay Roll.

Cash	$125,793.90	Balance at commencement, being two days' labor applied and distributed but not paid	$831.78
Balance, three days' labor applied and distributed but not due	1,247.67	Manufacturing acc't: Wages applied and distributed	120,250.40
		Factory general expense: Am't not applied to prime cost	5,959.39
	$127,041.57		$127,041.57
		Balance, three days' wages applied and distributed.	$1,247.67

Factory General Expense.

Balance at commencement, proportion applicable to inventory of partly manufactured goods		$8,037.17	Finished goods account	$24,449.30
Cash	$24,846.00		Transfer of the total expenditure under this account, less the proportion applied to partly manufactured goods as per inventory, being 98.40336% of $24,846.00.	
Less wages not applied to cost account.	5,959.39	18,886.61		
Factory pay roll account, wages not applied to prime cost		5,959.39	Balance carried down, being the amount referred to above	8,433.87
		$32,883.17		$32,883.17
Balance, inventory		$8,433.87		

Factory Management Expense.

Balance at commencement	$12,074.92	Finished goods account	$37,491.68
Proportion of expense applicable to partly manufactured goods included in inventory.		Transfer of total expense under this caption less the proportion applicable to partly manufactured goods as per inventory, being 98.40336% of $38,100.00.	
Cash	38,100.00	Balance carried down being the amount referred to above	12,683.24
	$50,174.92		$50,174.92
Balance, inventory	$12,683.24		

MANUFACTURING ACCOUNT.

Balance at commencement		$63,888.44	Finished goods account:		
Prime cost of partly manufactured goods			Transfer of value of finished goods from factory to warerooms at prime cost, viz.:		
Raw material account		79,820.34	Materials	$78,542.58	
Requisitions for consumption			Labor	118,333.75	$196,876.33
Factory pay roll account		120,250.40	Balance, inventory at prime cost		67,082.85
Wages applied and distributed					
		$263,959.18			$263,959.18
Balance, inventory at prime cost		$67,082.85			

FINISHED GOODS.

Balance at commencement, being the total cost as per inventory		$21,656.01	Trading account:		
Manufacturing account:			Cost of goods sold		$251,949.90
Goods transferred from factory to wareroom at prime cost, viz.:			Balance, inventory		28,523.42
Materials	$78,542.58				
Labor	118,333.75	196,876.33			
Factory general expense:					
Proportion of factory expense applicable to finished goods, 98.40336% of $24,846		24,449.30			
Management expense:					
Proportion of management expense applicable to finished goods		37,491.68			
		$280,473.32			$280,473.32
Balance, inventory		$28,523.42			

234. *Intermittent process production.*—In a machine shop, an electrical supply manufacturing company or a printing establishment, for example, the product manufactured is composed of numerous units of varying sizes, quantities, shapes and qualities. Here we have instances of intermittent process production. It is not difficult to perceive that where so many different units are manufactured in irregular lots, the opportunities for loss are numerous, unless some systematic, accurate method of establishing the cost of each unit is provided.

To attempt to record upon the general financial books the details of each lot of goods manufactured in such an establishment would not only entail the expenditure of a great amount of unnecessary time and labor, but would result in confusing the records. This detailed cost information is of statistical nature and should be separated from the more general information upon the accounting records. Separate cost departments are maintained for this purpose. Thus opens a field which, while closely related to accounting, nevertheless stands by itself as will be seen by consulting the volume on "Cost Finding."

235. *Financial accounts in agreement with cost records.*—Whatever money is spent in the factory comes out of the general fund and in some form must appear upon the general financial books. It has been held that the cost accounting system or the cost finding system should be operated without regard to the general books. The advocates of this theory maintain that it is a separate activity dealing primarily with statistics, while the general accounting books are concerned only with general results in dollars and cents. This view does not seem to be wholly justified. As we have already seen, the manufacturers and the business men generally rely

upon their books of account to tell them whether their enterprises are profitable or not. That is the kind of information in which they are chiefly interested. Next they want to know how much profit has been made. And from that point they proceed to analyze each department. "My manufacturing costs," says the manufacturer, "are so much. How's that? Last year they were only so much. Bring your cost records. Ah! We lost $32,000 on that Smith job, $4,000 on the Brown job, etc." Clearly, if the cost records should indicate that the cost of manufacturing was not so great as appears in the general books, what an uncertain position the manufacturer would occupy!

From this we can only argue that the cost records, however statistical they may be, are really supplementary to the general financial books. Obviously, this must be so since the manufacturer reasons not from the cost records to the financial books but from the latter to the former. He first obtains from his general books a general view of the operations in his establishment, and thereupon goes for detailed information to his statistical records.

This procedure applies not only to the manufacturing department but to the sales, financial and other departments as well. The sales department usually keeps a detailed list of its salesmen, showing how much commission each man has earned during the year. It is evident that the total of the commissions earned as shown by this record must equal the total of the commissions paid as shown by the general books.

Having established for our purposes, the necessity for agreement between the cost records, as explained by Professor Kimball in the next volume, and the manufacturing accounts upon the general books, we may proceed

to determine wherein this agreement can be manifested. Before entering upon the discussion of this subject, however, it should be said that in practice such agreement is rarely ever absolute. The cost specialist deals with such minute figures and obtains his records from so many different sources that it is to be expected that certain discrepancies will creep in. The intelligent manufacturer recognizes this condition and does not let it interfere seriously with his calculations, so long as the discrepancy is not too great. In a large manufacturing establishment, if the financial and cost records should vary $200 or $300 when the total figures represent several hundred thousand dollars, it would be folly to give this matter more than passing thought.

236. *Definition of various manufacturing terms.*—Every manufactured article may be divided into three elements of cost: (1) the wages of the workmen who apply labor to the article itself, (2) the material of which the article is made, and (3) the wages of foremen, superintendents, factory clerks, watchmen and other factory employés, as well as the general factory expenses, such as heating, lighting, rent, taxes and the like. The first cost element—the wages of workmen whose labor is applied directly to the article—is known as direct or productive labor. The material is known as direct material and the other items are known by the collective term of factory overhead or factory burden or manufacturing expense.[1]

The manufacturing accounts upon the general books indicate the charges to be made under each of these three general headings. Moreover, the third group—factory overhead—is subdivided into numerous smaller accounts. Upon the general ledger we shall have an ac-

[1] For more detailed discussion of these terms see Vol. VII, "Cost Finding."

count called direct labor to which are assigned the wages of workmen, such as lathe-hands, drop-forge hands and the like. These men devote their entire time to the direct production of the articles manufactured, and not to supervision. Where, as is sometimes the case, the time is divided—part being devoted to direct production and part to supervision—the wages also are divided. To another account called "unproductive or indirect labor" are charged the wages of those men in the factory whose work is of such a general nature that it cannot be said to apply direct to any one job or group of jobs. This unproductive labor account—the name, by the way, being a misnomer—is included along with other accounts in the general element of the cost known as factory overhead.

For direct material there may be a number of accounts. Ordinarily the term "raw material" is used to denote them all, taken collectively. If the concern's raw material is one kind of product only, then only one direct material account would be operated. If three or four or more different types of raw material are used it is likely that as many accounts will be maintained, in order that the manufacturer may compare his consumption of each kind of material. Occasionally, also, what is known as indirect material is used. The term applies to supplies which are not chargeable in accurate quantities to any one job or group of jobs. The indirect material account is also included under factory overhead.

Direct labor and direct material taken together constitute what is known in general accounting as "prime cost" and are separated in the manufacturer's profit and loss statement as a matter of convenience in determining the relation of factory overhead to prime cost. Similarly,

if the general books indicate that $100,000 has been spent for labor in the factory, the cost department must show that the total labor charged against the various orders or lots that have gone through the factory amounts to $100,000. If, for example, the cost clerks show that only $75,000 worth of labor was included in the cost of goods manufactured, then we must conclude that either the cost records are wrong, or the financial records are wrong or again that $25,000 was charged to pay roll but not paid to bona fide workmen.

The factory overhead element may be composed of a great many different accounts—the number depending altogether upon the nature of the business and upon the amount of detail desired. The more prominent expenses included in this term are: indirect or unproductive labor, indirect material, factory supplies, rent of factory, repairs to machinery, heat, light and power, plant insurance, depreciation of plant and of machinery and miscellaneous factory expenses.

The cost keeper's final figures indicate how much of the cost of each job or lot of goods is represented in direct labor, how much in direct material and how much in factory overhead. Inasmuch as the total of these three different cost elements is recorded in the financial books, it is clear that the total of the cost keeper's calculation under each of these three heads should agree with those in the financial books. If there is a serious difference, either the cost keeper or the general accountant has made a grievous blunder.

237. *Departmentizing manufacturing accounts.*—It is usually desirable to separate the manufacturing accounts into departments. This would be necessary if the proprietor wished to determine the cost in each department. In order to suggest how this may be done, a

classification of accounts for a plant operating a machine shop, a drop-forge department, an assembly department and a power plant is here given:

Classification of Accounts

MACHINE SHOP

Labor—Direct.
Labor—Indirect.
Power.
Oil.
Waste.
Other Supplies.
Miscellaneous Expense (including Heat and Light).
Superintendence and General.
Tools—Repairs and Replacements.
Machinery, Repairs and Replacements.
Buildings—Repairs.
Employers' Liability Insurance.
Fire Insurance.
Taxes.
Spoiled and Defective Work (less value as scrap heap).
Castings—Rough.
Castings—Machined.
Forgings—Rough.
Forgings—Machined.

ASSEMBLY DEPARTMENT

Labor—Direct.
Labor—Indirect.
Power.
Material (in detail).
Supplies.
Miscellaneous Expense.
Superintendence and General.
Tools—Repairs and Replacements.
Machinery, Repairs and Replacements.
Buildings—Repairs.
Employers' Liability Insurance.
Fire Insurance.
Taxes.
Materials Received (in detail).
Finished Product.

POWER PLANT

Coal.
Water.
Wood.
Labor—Direct.

DROP FORGE DEPARTMENT

Labor—Direct.
Labor—Indirect.
Power.
Supplies.

Labor—Indirect.
Supplies—Electrical—Steam.
Superintendence and General.
Machinery and Tools — Repairs and Replacements.
Buildings—Repairs.
Employers' Liability Insurance.
Fire Insurance.
Boiler Insurance.
Taxes.

Dies.
Miscellaneous Expense (including Heat and Light).
Superintendence and General.
Tools—Repairs (show labor and material separate).
Employers' Liability Insurance.
Fire Insurance.
Taxes.
Defective Castings (less value scrap).
Castings—Rough.
Completed Forgings.

238. *Manufacturing accounts as related to trading accounts.*—From what has thus far been said, we rightly conclude that whereas in a trading concern there are only two distinct sections of the profit and loss accounts —the trading, and the profit and loss accounts proper —in the manufacturing concern there are three, since the manufacturing accounts must be added. The trading account in the manufacturer's statement begins with the cost of goods sold, just as it does in the trading concern, except that now the cost of goods sold is determined in the manufacturing account.

The manufacturer may desire to throw all of the profit into the trading account or he may give the manufacturing department credit for part of it. It is for him to say whether the trading section should be charged at actual manufacturing costs with the goods it sells or at market prices. If, for example, the manufacturing department is credited at market prices with the goods turned over to the trading department, it will show a profit if market prices are higher. While the trading department may

also make a profit, this will necessarily be less than if the goods had been charged at actual costs. If market prices are lower than manufacturing costs the situation would be reversed.

239. *Manufacturing accounts illustrated.*—The general books of the Blank Manufacturing Company, also operating under a system of cost accounts, show the following condition at the opening of the fiscal year: Raw materials in store room, $15,621.42; factory pay roll, applied and distributed but not paid, two days, $831.78; partly manufactured goods, at prime cost, $63,888.44; and the further value of $8,037.17, to cover factory overhead, also $12,074.92, to cover management charges; finished wares in stock at a total cost of $21,656.01. The financial operations during the ensuing year include: purchases of raw materials, $80,416.45; factory pay rolls, $125,793.90; factory expense including wages not applied to cost accounts, $24,846; management expenses, $38,100. The manufacturing operations during the same period comprehend: raw materials issued on requisition for consumption, $79,820.34; wages applied and distributed to manufacturing cost, $120,250.40, and to factory expenses, $5,959.39, included in the sum stated in the preceding paragraph.

Finished goods were transferred from the factory to the warerooms, at prime cost, covering materials, $78,542.58, and labor, $118,333.75. The trading operations during the same year comprehend: cost of goods sold, $251,949.90; proceeds from goods sold, $302,339.88. At the close of the year the partly completed goods included, in addition to prime cost, the further elements of value to cover factory and management expenses in the amounts respectively of $8,433.87, and $12,683.24, and factory pay roll for three days amounting to

$1,247.67, which has been applied and distributed, though not due till the close of the current week.

Our problem now is to open the general ledger accounts that *control* the cost accounts, to show the operation of each account and the net profits resulting; also to calculate the percentage to be added to each $1 of material and of labor to give the total cost.

240. *The account explained.*—One of the three elements of cost, as we have learned, is raw material. It has also been stated that usually a separate account for raw material is carried on the ledger. This account was charged at the beginning of the period with an inventory amounting to $15,621.42 and during that period with an additional sum of $80,416.45. The amount of raw materials now on hand deducted from the total of the amount just given will, of course, give the amount of raw material actually consumed. This consumption, $79,820.34, is one of the charges to the manufacturing account on page 340.

At the close of the last period we had charged off $831.78 in wages not paid. (See factory pay roll, page 338.) Naturally, it was necessary to credit the factory pay roll account with that amount to offset the actual payment later, since all amounts paid out in wages are charged directly to the factory pay roll account. During the period we paid out in wages $125,793.90. In addition, since the month closes three days after the last pay day, three days' labor is to be charged against this period of operation. The amount, $1,247.67 is charged to the factory pay roll account, and when the account is closed it is again credited to be applied to the next period. We are told that of the total wages *consumed* $120,250.40 was direct labor; this, therefore, is another charge to the manufacturing account and con-

stitutes a second element of cost. Of the wages paid, \$5,959.39 is indirect labor and is charged to factory general expense (page 339), which is our account for factory overhead. This closes the factory pay roll account, leaving open only the credit to be offset against the payment for the three days' wages at the next pay day.

At the beginning of this period there were on hand partly finished goods. Part of the cost of these goods was represented by a prime cost of \$63,888.44. Therefore, not all of the charges in the manufacturing account (page 340) during the last period were closed out. This amount appears as a debit charge to be accounted for during this period if the goods are finished. Accordingly we have in the manufacturing account a total of \$263,959.18 to dispose of.

We are told that during the period there were transferred to the warerooms from the factory, finished goods at a total prime cost of \$196,876.33 (material \$78,542.58 and labor \$118,333.75). We must, therefore, credit the manufacturing account with this amount and charge the finished goods account (page 340).

We find, however, that the manufacturing account is not closed. We have spent altogether in materials and labor \$263,959.18, of which amount \$67,082.85 is unaccounted for. The reader will quickly recognize that this amount represents materials and labor expended upon goods which have not yet been completed; therefore, this amount is carried on as an inventory, representing part of the cost of inventory of uncompleted goods.

Taking up now the factory general expense account (page 339), we find that at the beginning of the period part of the cost of the uncompleted goods was repre-

sented by factory overhead amounting to $8,037.17. This amount then stood to the debit of factory general expense account until this period when it was recharged against the finished goods along with additional general expense. We also find that during this period a total of $24,846 was spent for factory general expense; but this amount also included the wages which were not applied to prime cost. Since these wages have already been charged to factory expense, we must consider only the remainder of the factory expense as an additional charge. This remainder is $18,886.61. We have, therefore, a total of $32,883.17 in factory general expense to dispose of. Part of this amount, of course, is chargeable to the goods which were finished during the period. We were not told how much this was, but are notified that the partly completed goods at the close of the period included a portion of the factory general expense amounting to $8,433.87. The difference, then, must be the amount of factory general expense applied to the goods that were finished.

The Blank Manufacturing Company has been keeping its factory management expense in a separate account. This element, of course, is part of the factory overhead, but is generally separated to indicate what part of the factory costs is composed of managerial expenses. The treatment of the management expense account, therefore, is similar to the factory general expense account. At the beginning of the period it was charged with the amount considered as being chargeable to partly completed goods, namely, $12,074.92, representing the management expenses that had not been consumed in previous costs. During the year the company spent a further amount of $38,100 for factory supervision. We are told that of the total $50,174.92,

$12,683.24 represents management expenses to be applied to the uncompleted goods on hand. The balance, therefore, must be applicable to those goods which were finished, hence is charged to the finished goods account.

If, at this time, we wish to determine the total value of uncompleted goods, we simply add the balances remaining in manufacturing, factory general expense, and manufacturing expense accounts.

The finished goods account is the last account to be considered before the profit and loss statement is prepared. There were on hand at the beginning of the period goods amounting to $21,656.01, represented by the balance charged to the finished goods account. We have already charged to this account the prime cost of the goods finished during the current period, namely, $196,876.33, also the portion of factory expense that is applicable to finished goods, $24,449.30, as well as the portion of management expense applicable to finished goods, $37,491.68. If all the finished goods were sold, the total of these amounts $280,473.32 would be transferred to trading account. Since, however, there is left on hand $28,523.42 of finished goods, this amount must be subtracted.

The trading account, then, is charged with $251,949-.90, the difference just referred to, and is credited with sales of $302,339.88. The difference between the two items represents the prime profit which, as the reader will readily understand, is determined in the same manner as that which applies to the profit and loss statement in the trading company. It is not necessary to carry the operations further, since the trading items would be recorded in the manner already explained.

We should not leave this part of the problem, however, without understanding that occasionally a manufacturing account is opened into which are thrown all

the factory items, including the factory general expense and management expense. In that case the balance of the manufacturing account will actually represent the cost of goods sold. In this case, for example, the balance of manufacturing account would have been $251,-949.90. The method, while used, is not recommended, since it does not tell so clear a story as does the method just described.

In order that the Blank Manufacturing Company may be able to add the proper percentage of factory overhead charges—factory expense and management expense—during the course of its operations, it must rely upon the experiences of previous years. This is true because it is not possible to apportion the current factory expenses until the close of the period, when the amount of goods manufactured has been ascertained. The subject of distributing factory overhead, one may add, presents a most intricate problem in cost finding. It is not in our province to discuss that problem, since it is fully covered in Professor Kimball's text. It may be said, however, that some method must be devised whereby a certain lot of goods is charged with its proper portion of the general expenses for each article manufactured. In this particular case we can use only the cost of the raw material and of the labor as a basis for determining the percentage to be added for factory overhead. If the current year's experience is to be used next year as a criterion, a proper method of finding the percentage is as follows:

Manufacturing operations during the year:	
Raw material issued on requisitions	$79,820.34
Labor applied and distributed to manufacturing cost	120,250.40
Year's charge to prime cost	$200,070.74

Overhead charges during the year:

Factory expense	$24,846.00
Management expense	38,100.00
Year's overhead charges	$62,946.00

$$\frac{62{,}946}{200{,}070.74} = 31.46187\% \text{ percentage to be added to prime cost to make cost of production.}$$

Finished goods during the year at prime cost:

Raw material	$78,542.58
Labor	118,333.75
	$196,876.33

$$\frac{196{,}876.33}{200{,}070.74} = 98.40336\% \text{ percentage of year's prime cost used in finished goods during year.}$$

Therefore,
$24,846.00 × 98.40336% = $24,449.30—factory expense, and
$38,100.00 × 98.40336% = $37,491.68—management expense.

Proof: $196,876.33 × 31.46187% equals $61,940.98,
and $24,449.30 + $37,491.68 also equals $61,940.98.

Hence, 31.46187% is to be added to each dollar of labor and material.

Profit and Loss Statement of the Blank Manufacturing Company

Sales	$302,339.88
Cost of Goods Sold.	
Prime cost:	
Raw materials	$78,542.58
Direct labor	118,333.75
Total prime cost	$196,876.33

Factory general expenses	$24,449.30	
Factory management expenses.	37,491.68	$61,940.98
Total manufacturing cost		$258,817.31
Finished Goods.		
Inventory at close of period...	$28,523.42	
Inventory at beginning of period	21,656.01	
Finished goods added to stock (deduct)		6,867.41
Cost of goods sold (deduct from sales)..........		$251,949.90
Prime profit		$50,389.98

Here follow selling expenses, administration expenses, etc.

CHAPTER XXIII

CONSIGNMENTS AND VENTURES

241. *Consignments inward and outward.*—Consignments of goods either inward or outward frequently present a certain amount of difficulty. Occasionally outward consignments are called "shipments," while inward shipments are termed "consignments." There is no necessity, however, for such a distinction since the term inward or outward will designate whether we receive the goods or whether we ship them. The principle involved in this class of transactions is that one merchant acts as agent for another. He may receive in compensation a commission only, or he may also share in the profits of the particular enterprise. Therefore, we may say that consignments inward may be for the account of another—the merchant receiving the goods having an interest in them—or they may be exclusively for the risk and benefit of another. In the former case the merchant is one of the principals, in the latter he acts as agent.

Consignments outward are generally on account of the consignor or as co-partner with others. Where the merchant is interested with others in a shipment of goods, it is generally known as a joint account or venture.

242. *Treatment of consignments.*—As to the method of treating consignments, it is best to follow the rules here given: In the case of consignments received to be sold for and on behalf of another, no entry should be

made on the receipt of the goods except when charges have been paid by the consignee. The goods are the property of the consignor and therefore do not form a portion of the assets of the consignee. A memorandum may be made in a book set aside for that purpose, so as to show the receipt of the goods. All charges paid on the consignment should be debited to a consignment account. To this account should also be debited all advances made to the consignor. All sales of the consignment should be credited to a consignment sales account.

When the sales are completed the consignee will desire to render to the consignor an account of sales showing the proceeds due the consignor. In such case he debits the consignment sales account for all charges as well as for the net proceeds and credits the general consignment account for items transferred to the consignment sales account, crediting at the same time the consignor's account with the net proceeds.

Upon shipping goods the consignor debits an account headed merely "consignment outward or consignment to......", for the cost of the goods shipped and any charges paid thereon, such as freight, cartage, insurance, etc. When he receives the account sales rendered to him by the consignee, he debits the cash he receives or, if cash is not remitted, the consignee personally, and credits the consignment outward account for such proceeds. The difference, if any, represents either his profit or his loss on the venture.

243. *How to enter joint transactions.*—A joint adventure exists when two or more parties combine to participate in some particular enterprise. Thus a person may consign goods in which he deals to a merchant in another city or country, both parties participating in

Dr. X, Y, Z, JAPAN, IN ACCOUNT WITH JOHNSON BROS (Joint Cons't with Smith & Co.) Cr.

	Interest Cr. Johnson Bros.	Interest Cr. Smith & Co.	Amount		Interest Dr. Johnson Bros.	Interest Dr. Smith & Co.	Amount
19—				19—			
March 31 50 cases printed cotton...........		$163.80	$4,095.00	March 31 Cash proceeds of draft at 90 days for $1,500 less discount of $20.00...		$59.20	$1,480.00
March 31 Cash, packing charges..........	$0.88		22.00	Nov. 30 Cash, X, Y, Z, as per account sales.			2,500.00
March 31 Cash, freight, insurance, etc.........	4.80		120.00	No.v 30 Interest per contra.	$5.68	104.60	
Nov. 30 Interest payable to				Nov. 30 Balance, loss:			
Johnson Bros....			5.68	Johnson Bros....			183.64
Smith & Co......			104.60	Smith & Co......			183.64
	$5.68	$163.80	$4,347.28		$5.68	$163.80	$4,347.28

Dr. SMITH & CO., IN ACCOUNT WITH JOHNSON BROS. (Joint Cons't to X, Y, Z, Japan) Cr.

19—			19—		
Mch. 31	Cash..................................	$1,480.00	Mch. 31	Fifty cases of printed cottons........	$4,095.00
Nov. 30	Share of loss on venture...............	183.64	Nov. 30	Interest...............................	104.60
Nov. 30	Balance, per check herewith...............	2,535.96			
		$4,199.60			$4,199.60

such shipment. Often it also happens that two or more merchants combine to ship to another city or country an article in which they deal on a joint account. It is usual in such cases for one of the members of the venture, called the manager, to handle the transaction, he being sometimes allowed a small percentage on the sales to remunerate him for his time and trouble. The best method of dealing with such a joint transaction is as follows:

PROOF OF JOHNSON BROS. LOSS.

PAYMENTS:	
Packing	$22.00
Freight, etc.	120.00
Interest	5.68
Smith & Co.	2,535.96
	$2,683.64
RECEIPTS:	
X, Y, Z, Japan	2,500.00
Excess of payments over receipts (loss)	$183.64

The manager should open an account entitled "joint adventure to ...." and debit this account with the cost of the goods, shipping and other charges, including even interest on money invested, and credit it with the gross amount realized. The balance of this account is transferred to the partners' personal accounts for their respective shares in profits or losses, and to his own profit and loss account for his share in the venture.

244. *Joint accounts illustrated.*—Johnson Brothers agree with their friends, Smith and Company, to participate in a consignment to Japan on joint account of the following:

Fifty cases of printed cottons, the invoice price of which is $4,200.00, less 2½ per cent. Johnson Brothers pay the packing

charges, $22.00; also freight, insurance and other charges, $120.00. They draw on their correspondents in Japan, in advance, $1,500.00 at 90 days, which is discounted at a cost of $20.00 and the proceeds handed to Smith and Company, as part payment. The transaction began March 31, 1907. On November 30, 1907, Johnson Brothers receive the account sales and net proceeds, $2,500.00. They then pay Smith and Company the balance due to them.

Prepare a joint consignment account, charging interest on the amounts advanced at 6 per cent per annum, in months, closing it by dividing the loss.

Prepare also an account to be rendered by Johnson Brothers to Smith and Company, closed by payment of the balance, and prove that the losses borne by each are equal. (See page 358.)

245. *Consignment accounts illustrated.*—The X, Y, Z Company of New York City consigned to James and Company of San Francisco, California, on the 31st of October, 19—, 400 machines as follows:

Size	*Number*
0	100
1	100
2	100
3	50
4	50

The list prices of the machines are as follows:

Size	*Price*
0	$1.00
1	$1.25
2	$1.50
3	$1.75
4	$2.00

They were to be sold subject to a trade discount of 25 per cent and an extra 5 per cent discount for cash. On the 15th of January the company received an account sales to December 31, 19—, James and Company having sold twenty of each of the following numbers: 0, 1 and 2; and ten of number 3.

James and Company deducted for trade discount $23.12 and for cash discount $3.47, for insurance $3.00 on the whole consignment, also for expenses and postage $2.50, and remitted a note at sixty days for the balance.

The consignor's records are based upon the account sales rendered by the consignee which, in this case, would be as follows:

Account Sales of 400 Machines, Consigned by the X, Y, Z Company, New York

1908			
Jan. 15.	Sold 20 No. 0 machines at..$1.00	$20.00	
	Sold 20 No. 1 machines at.. 1.25	25.00	
	Sold 20 No. 2 machines at.. 1.50	30.00	
	Sold 10 No. 3 machines at.. 1.75	17.50	
		$92.50	
	Less 25% trade discount......	23.12	$69.38
	Less cash discount	3.47	
	Insurance	3.00	
	Expenses and postage........	2.50	8.97
	Balance due consignor......		$60.41

Note at 60 days; 330 machines unsold.

The X, Y, Z Company in order to record the transac-

tion in their books would make the following ledger entries:

DR. CONSIGNMENT OUTWARD ACCOUNT, JAMES & CO., CR.
SAN FRANCISCO, CAL.

1907			1908		
Oct. 31.	Merchandise.......	$562.50	Jan. 15.	James & Co. Account sales........	$92.50
1908					
Jan. 15.	James & Co. expenses and trade discount.........	32.09			

DR. MERCHANDISE, SALES ACCOUNT, CR.

			1907		
			Oct. 31.	By consignment, Account James & Co.....	$92.50

DR. JAMES & CO., SAN FRANCISCO, CAL., CR.

1908			1908		
Jan. 15.	Consignment.......	$92.50	Jan. 15.	Expenses...........	$32.09
			Jan. 15.	Notes receivable....	60.41
		$92.50			$92.50

DR. NOTES RECEIVABLE. CR.

1908		
Jan. 15.	James & Co........	$60.41

CHAPTER XXIV

REALIZATION, LIQUIDATION AND INSOLVENCY ACCOUNTS

246. *Realization and liquidation accounts.*—In Chapter XVI appears an illustration of the dissolution of a partnership in which all the assets were sold for their book values and the liabilities paid off, the remaining cash being distributed among the partners. That, however, is an improbable situation. Rarely, if ever, will the assets realize the full book values. More frequently there is a loss on the realization of assets. It might readily happen, however, that one or two of the assets realize more than their book values. It is not usually desirable to show all such losses or profits by means of a profit or loss account. The latter as we have seen, is a summary of all economic accounts, showing the results of the operation of a business enterprise. The sale of the assets of the firm on winding up affairs should not, therefore, be carried through that summary, but through what is known as a realization and liquidation account.

Moreover, when a partnership is dissolved, the winding up of the affairs may continue for months or even for years. Only one or two partners of the firm are likely to remain to realize and liquidate their affairs. These members, therefore, act in a dual capacity. They are principals, so far as the outside world is concerned; they are also agents or trustees, representing the interests of the other members of the firm. In their account

keeping these trustees must show their dual capacity, and the realization and liquidation account was designed expressly for this purpose.

It will be seen that this account is for all practical purposes built upon the same lines as an ordinary profit and loss account. Often, however, the method is adopted of transferring the balance standing upon all the various assets' accounts to the debit of the realization account, as at the date of dissolution. The asset accounts are thus closed at once, and the cash realized on the disposal of the asset is posted direct to the credit of the realization account. As the latter method is preferable we conclude as follows:

(1) The realization and liquidation account is debited with the total book value of the assets as shown in the balance sheet of the firm on the date of the commencement of the liquidation.

(2) It is credited with the book value of the liabilities to outside creditors as per balance sheet.

(3) It is thereafter credited with the assets as realized.

(4) It is thereafter debited with the liabilities as they are liquidated.

(5) It is also debited with the expenses in connection with the realization and the cost of liquidation.

It will readily be seen that where this method is followed, the first part of the realization and liquidation account will contain on the debit side what we may call "assets to be realized" and on the credit side "assets realized" and the difference will show the loss on the realization proper, exclusive of expenses incurred in that connection, thus:

Assets to be realized	$500.00	Assets realized	$400.00
		Loss on realization	100.00
	$500.00		$500.00

Whichever method is adopted, whether we enter on the realization and liquidation account losses or gains on the assets only, or the full accounting of assets and liabilities, the balances of this account will be the same, namely, a shrinkage (or gain) on the realization. This balance is then transferred to the capital accounts of the various partners, each partner bearing his share of the loss (or profit) on the realization.

247. *Simple dissolution illustrated.*—A. Jones, F. Smith and B. Peters are partners. Their respective interests in the profits of the firm are: one-half, three-eights and one-eighth.

On December 31, 19—, the partnership terminates, the time for its existence having expired, and their balance sheet on that date is as shown on page 366.

On June 30th, of the following year, when the affairs of the firm have all been liquidated, it is found that the assets have realized $2,000 less than the book values as given in the balance sheet; namely, accounts receivable $500; lease-hold property $750; and plant and machinery $750. The expenses of winding up the business amount to $450.

In accordance with the provisions of the partnership agreement the partners are entitled to interest at five per cent per annum upon their capital remaining in the business.

On the following pages are given the ledger accounts of the firm as they appear after all the assets have been sold and the debts paid and prior to the distribution of

BALANCE SHEET OF THE FIRM JONES, SMITH & PETERS, AS ON DECEMBER 31, 19—

Assets:			Liabilities:		
Cash		$1,250.00	Accounts payable		$17,750.00
Bills receivable	$1,500.00				
Accounts receivable	30,000.00	31,500.00	Proprietorship:		
Inventory of merchandise		5,000.00	A. Jones's capital account	$17,500.00	
Leasehold property		2,500.00	F. Smith's capital account	7,500.00	
Plant and machinery		7,500.00	B. Peters's capital account	5,000.00	30,000.00
		$47,750.00			$47,750.00

SOLUTION

CASH ACCOUNT

Jan. 1	To balance	$1,250.00	June 30	By creditors	$17,750.00
June 30	Bills receivable	1,500.00	June 30	Liquidation expenses	450.00
June 30	Accounts receivable	29,500.00	June 30	Balance	27,550.00
June 30	Merchandise inventory	5,000.00			
June 30	Leasehold property	1,750.00			
June 30	Plant, etc.	6,750.00			
		$45,750.00			$45,750.00
July 1	To balance	$27,550.00			

REALIZATION ACCOUNT

June 30	To Loss on accounts receivable		$500.00	June 30	By loss on realization, viz.:		
	Loss on leasehold property		750.00		Jones 50%	$1,600.00	
	Loss on plant		750.00		Smith 37½	1,200.00	
	Liquidation expenses		450.00		Peters 12½	400.00	$3,200.00
	Interest on capital:						
	Jones	$437.50					
	Smith	187.50					
	Peters	125.00	750.00				
			$3,200.00				$3,200.00

Bills Receivable

Jan. 1	To balance	$1,500.00	June 30	By cash	$1,500.00

Accounts Receivable

Jan. 1	To balance	$30,000.00	June 30	By cash	$29,500.00
				Realization account	500.00
		$30,000.00			$30,000.00

MERCHANDISE INVENTORY

Jan. 1	To balance	$5,000.00	June 30	By cash	$5,000.00

LEASEHOLD PROPERTY

Jan. 1	To balance	$2,500.00	June 30	By cash	$1,750.00
				Realization account	750.00
		$2,500.00			$2,500.00

PLANT AND MACHINERY

Jan. 1	To balance	$7,500.00	June 30	By cash	$6,750.00
				Realization account	750.00
		$7,500.00			$7,500.00

ACCOUNTS PAYABLE

June 20	To cash	$17,750.00	Jan. 1	By balance	$17,750.00

A. JONES'S CAPITAL ACCOUNT

June 30	To realization account loss	$1,600.00	Jan. 1	By balance	$17,500.00
	Balance	16,337.50	June 30	Interest	437.50
		$17,937.50			$17,937.50
			July 1	By balance	$16,337.50

F. SMITH'S CAPITAL ACCOUNT

June 30	To realization account—loss	$1,200.00	Jan. 1	By balance	$7,500.00
	Balance	6,487.50	June 30	Interest	187.50
		$7,687.50			$7,687.50
			July 1	By balance	$6,487.50

B. PETER'S CAPITAL ACCOUNT

June 30	To realization accounts—loss	$400.00	Jan. 1	By balance	$5,000.00
	Balance	4,725.00	June 30	Interest	125.00
		$5,125.00			$5,125.00
			July 1	By balance	$4,725.00

the cash among the partners. We have followed the practice of crediting each asset with the cash realized for it, and of charging the realization account with the various losses.

248. *Other uses of a realization and liquidation account.*—The illustration of a realization account just shown applies in the case of a dissolution. Such an account may, however, be desired for other purposes. As already mentioned, the dual capacity in which the person (or persons) who winds up the affairs, is placed, furnishes the occasion for the creation of such an account. This does not mean that only in partnership affairs do we prepare such an account. It is, in fact, used in other cases as well.

A business may become financially embarrassed without becoming insolvent. It may have all its capital tied up in machinery, plant, materials or merchandise. The creditors are notified of the state of affairs and are asked to render the firm whatever assistance they can. If the creditors are willing to do this, and usually they are, they will want some outsider, perhaps a creditor, to take charge of the affairs of the firm. This trustee is in the same position as our partner, mentioned before, with this difference, however, that he does not take charge of the firm's affairs for the purpose of discontinuing the business, but for the purpose of continuing operations, realizing on some of the assets that can be converted into cash, and liquidating creditors' claims.

The realization and liquidation account in such a case will not only show the loss or gain or realization proper, but will also show the result of the trustee's own operations. For that purpose a section is added to the realization and liquidation account headed "Supplemen-

tary charges" and "supplementary credits." The former would go on the debit, and the latter on the credit side of the account.

249. *Realization for creditors illustrated.*—Harvey Brothers became financially embarrassed, and a trustee was appointed on January 1, 19—, to take charge of their affairs for the benefit of creditors. On that date the firm's financial condition was as indicated in the balance sheet shown on page 372. In order to realize advantageously on all assets, the trustee purchased merchandise to the amount of $10,000 and during the year collected $21,350 cash for sales. The book debts realized $3,950. Of the bills receivable entered in the balance sheet as $18,000 there is on hand $8,000. The remaining $10,000 has been discounted with the bank and is represented on the liability side by the item notes receivable discounted. On the $8,000 notes on hand it is expected to realize the full sum, while of the $10,000 discounted with the bank only 70 per cent can be realized; the balance is lost.

The bills payable, taxes and interest on mortgages 5½ per cent, were paid in course of settlement. The trustee paid $5,000 to the creditors on account.

Current expenses were as follows: Salaries, $1,000, office expenses, $800; legal fees, $1,200; withdrawals for private use by the owners, $1,000 each, trustee's commissions, $2,000. On December 31, 19—, the trustee surrendered charge of the estate and paid over the cash balance on hand. There remained on that date merchandise on hand in the value of $5,600.

250. *Trustees' accounts explained.*—All the facts in connection with the realization and liquidation are given in the trustees' realization and liquidation account, but under separate sections. The first section on the debit

BALANCE SHEET OF THE FIRM HARVEY BROS., AS ON JANUARY 1, 19—

Assets:			
Cash in bank	$956.50		
Cash in hand	50.00	$1,006.50	
Bills receivable	$18,000.00		
Accounts receivable	4,500.00	22,500.00	
Merchandise inventory		4,350.25	$27,856.75
Real estate		20,000.00	
Machinery and tools		6,000.00	26,000.00
			$53,856.75

Liabilities:			
Loans payable		$1,000.00	
Bills payable	$6,000.00		
Accounts payable	9,000.00	15,000.00	
Taxes due		315.00	$16,315.00
Mortgage on real estate		15,000.00	
Mortgage on machinery and tools		5,000.00	20,000.00
Notes receivable discounted			10,000.00
			$46,315.00
Proprietorship:			
J. Harvey	$4,541.75		
S. Harvey	3,000.00		7,541.75
			$53,856.75

REALIZATION AND LIQUIDATION ACCOUNT SUBMITTED BY THE TRUSTEE OF THE FIRM HARVEY BROS. ON DECEMBER 31, 19—

ASSETS TO BE REALIZED:			LIABILITIES TO BE LIQUIDATED:		
Cash	$1,006.50		Loans payable	$1,000.00	
Bills receivable	18,000.00		Bills payable	6,000.00	
Accounts receivable	4,500.00		Accounts payable	9,000.00	
Merchandise inventory	4,350.25		Taxes due	315.00	
Machinery and tools	6,000.00		Mortgage on real estate	15,000.00	
Real estate	20,000.00	$53,856.75	Mortgage on machinery, etc.	5,000.00	
				$36,315.00	
LIABILITIES LIQUIDATED:			Contingent liability on notes receivable discounted	10,000.00	$46,315.00
Bills payable	$6,000.00		ASSETS REALIZED:		
Accounts payable	5,000.00		Cash	$1,006.50	
Taxes	315.00		Bills receivable	15,000.00	
Contingent liabilities	10,000.00	$21,315.00	Accounts receivable	3,950.00	
			Merchandise inventory	4,350.25	$24,306.75
LIABILITIES NOT LIQUIDATED:			ASSETS NOT REALIZED:		
Loans payable	$1,000.00		Real estate	$20,000.00	
Mortgage on real estate	15,000.00		Machinery and tools	6,000.00	$26,000.00
Mortgage on machinery, etc.	5,000.00				
Accounts payable	4,000.00	$25,000.00			

Supplementary Charges:			Supplementary Credits:		
Inventory of goods on hand, Jan. 1, 1908..	$4,350.25		Sales....................................	$21,350.00	
Purchases..............................	10,000.00		Inventory January 1, 1909..............	5,600.00	$26,950.00
Salaries...............................	1,000.00				
Expenses...............................	800.00				
Legal fees.............................	1,200.00				
Trustees' commissions..................	2,000.00				
Interest on mortgages (5½ on 20,000).....	1,100.00	$20,450.25			
Net profits............................		2,949.75			
		$123,571.75			$123,571.75

TRUSTEE'S CASH ACCOUNT

Receipts:		
To balance on hand January 1, 1908		$1,006.50
Cash sales	$21,350.00	
Accounts receivable (old account)	3,950.00	
Notes receivable	8,000.00	33,300.00
		$34,306.50
To balance		$1,891.50

Payments:		
By purchases of merchandise	$10,000.00	
Salaries for the year	1,000.00	
Expenses for the year	800.00	
Legal expenses	1,200.00	
Interest on mortgages	1,100.00	
Taxes	315.00	
Trustee's commission	2,000.00	
Accounts payable	5,000.00	
Bills payable	6,000.00	
Withdrawals by the members of the firm	2,000.00	
Contingent liabilities on discounted notes	3,000.00	$32,415.00
Balance on hand January 1, 1909		1,891.50
		$34,306.50

BALANCE SHEET OF HARVEY BROS. AS ON DECEMBER 31, 19—

Assets:			**Liabilities:**			
Cash	$1,891.50		Loan payable		$1,000.00	
Merchandise inventory	5,600.00	$7,491.50	Accounts payable		4,000.00	$5,000.00
Real estate subject to mortgage	$20,000.00		Mortgage on real estate		$15,000.00	
Machinery and tools	6,000.00	26,000.00	Mortgage on machinery, etc.		5,000.00	20,000.00
						$25,000.00
			Proprietorship:			
			J. Harvey previous capital	$4,541.75		
			One-half of profits	1,474.88		
				$6,016.63		
			Less withdrawal	1,000.00	5,016.63	
			S. Harvey previous capital	$3,000.00		
			One-half of profits	1,474.87		
				$4,474.87		
			Less withdrawal	1,000.00	3,474.87	8,491.50
		$33,491.50				$33,491.50

side, as will be seen, contains the same items as the asset side of the balance sheet under the heading "assets to be realized." It will also be noticed that among the other assets the item of cash is included, although this could be left out for the reason that cash is an item which is already realized upon. In order, however, to have the total of assets to be realized agree with the assets shown on the balance sheet, this item was included.

On the credit side we have "liabilities to be liquidated" showing a total of $46,315, which equals the total liabilities shown on the balance sheet. It will be noticed that the capital is omitted entirely, and rightly so, since it is not a liability to be liquidated. On the contrary, when all the liabilities are liquidated, what is left belongs to capital.

The second item on the debit side of the realization and liquidation account is "liabilities liquidated." All but four items have been liquidated, namely: the loans payable, the mortgage on real estate, the mortgage on the machinery, and the balance of $4,000 due to the creditors of the firm. The total of this section shows $21,315, while on the same side the section "liabilities not liquidated," consisting of the four items mentioned, amounts to $25,000, making up the total of the first section on the credit side.

The second section on the credit side shows "assets realized." The item bills receivable, amounting to $15,000 represents the amount given in the problem. The merchandise inventory is treated as a realized asset, because the trustee has utilized the goods—hence the asset is realized. The total of this section amounts to $24,306.75.

The third section, "assets not realized," consists of

real estate and machinery, and concludes the realization and liquidation proper.

We have not yet, however, considered the trustee's subsequent operations. Were we to add the items on the debit and credit sides of the realization and liquidation account, we should find that the total debit side amounts to $100,171.75, and the credit side to $96,621-.75, showing a difference of $3,550. That difference indicates the loss on the realization proper. This loss is represented by the following items: $3,000 loss on the notes discounted and $550 loss on the accounts receivable. However, as the trustee conducted the subsequent operations, it is not desirable to show the result of the realization without taking cognizance of these subsequent operations. We arrange then the final sections showing his operation.

On the debit side of this section under the heading "supplementary charges" are shown all the items that enter into cost of operation. The item of legal fees is included here since it cannot very well be placed in any of the other sections. The total of this section amounts to $20,450.25. On the credit side of this section under the heading "supplementary credits" are entered the sales for the period as well as the inventory of goods on hand at the end of the period, making a total of $26,950.

Had we added the former parts of the account separately from the supplementary charges, this section would show the profit or loss on the trustee's operation. In this case the cost of operation, as mentioned before, was $20,450.25, while the returns were $26,950, showing a profit on the trustee's operation amounting to $6,499-.75. As we do not show the trustee's operation apart from the realization proper, the loss sustained on the

realization is made good out of the profits made on the trustee's operations. That accounts for the net profit shown, amounting to $2,949.75, e. g., the difference between $6,499.75 (profit on the trustee's operation) and $3,550 (loss sustained on realization).

The next step in the solution is to show the balance of cash on hand with the trustee. For that purpose the trustee's cash account as shown on page 375 is prepared. The debit side of this account begins with the balance on hand on January 1, 19—. To this is added the cash received from the customers, cash sales and also cash collected on the notes which were in our possession, making a total of $34,306.50. On the credit side are shown all the payments made by the trustee including his commission, as well as withdrawals by the members of the firm, and the contingent liability on the discounted notes amounting to $3,000, making a total of $32,415. We find that the cash balance in the hands of the trustee is $1,891.50.

Our next step is to show the financial condition of the firm on the date of the termination of the trust. This is given on page 376. The total assets amount to $33,491.50.

251. *Another case illustrated.*—Messrs. Green and Sharp, having given the firm notes to a friendly company as an accommodation, became embarrassed through failure of the payee and appointed a trustee to realize and liquidate. On page 381 is a statement of their condition January 1, 19—.

The following is a memorandum of the trustee's transactions for the year: purchases to complete contract orders, $70,000; sales for year for cash, $108,000; uncollected accounts, $2,000; book debts receivable, on hand December 31, $10,000; bills receivable collected at a loss

of $600; book debts receivable, collected, $3,600, balance lost; received 75 per cent in full settlement of accommodation notes, and paid cash on account of same $48,000, giving renewal notes for $10,000. The legal fees, interest and petty expenses paid on account of accommodation paper amounted to $2,400.

The following payments were also made: mortgage with interest, and one year's accrued interest to December 31 of the same year, taxes, bills payable and book accounts payable; clerk hire, wages and other business expenses, with allowance of $100 per month to each of the active partners, one year's interest at 6 per cent to special partner, interest on Green's surplus capital ($6,325) one year at 6 per cent and the trustee's fee of $5,000—in all $10,000.

The special partner had an interest of 1/10 and the general partners shared alike in the residue of the net profits and losses.

On December 31st of the same year, the estate reverted to the firm.

252. *Comments on trustee's accounts.*—The trustees' accounts in this case, as shown on pages 381-385 are similar to those in the previous case, but with this difference: instead of showing the realization affairs and the trustee's operation in continuance, the realization proper is shown first with the results of such realization, and the trustee's operations are also shown separately. The recapitulation shows the net results of the affairs.

It will be seen that the ordinary profit resulting from the operation amounts to $5,229.50. The allowance to the active partners was $100 per month, but no allowance was made to the special partner who receives an allowance for interest on the surplus capital, as does Green. The trustee paid these items in cash and we

BALANCE SHEET OF MESSRS. GREEN & SHARP AS ON JANUARY 1, 19—

Assets:		Liabilities:	
Cash on hand and in bank	$500.00	Mortgage on real estate	$5,000.00
Stock of goods	20,000.00	Mortgage interest, accrued to January 1, 19—	250.00
Real estate	25,000.00	Taxes	375.00
Bills receivable	5,000.00	Book debts payable (including accommodation paper of payee, $58,000.00)	61,550.00
Book debts receivable (including accommodation account of payee, $58,000.00)	62,000.00	Bills payable	1,000.00
		Henry Maxwell, special partner	10,000.00
		Samuel Green, capital	20,325.00
		James Sharp	14,000.00
	$112,500.00		$112,500.00

REALIZATION AND LIQUIDATION ACCOUNT SUBMITTED BY THE TRUSTEE OF THE FIRM GREEN & SHARP DECEMBER 31, 19—

Assets to be Realized:			
Bills receivable		$5,000.00	
Accounts receivable (including accommodations)		62,000.00	
Merchandise inventory		20,000.00	
Real estate (subject to mortgage)		25,000.00	$112,000.00
Liabilities Liquidated:			
Mortgage on real estate		$5,000.00	
Mortgage interest to Jan. 1, 19—		250.00	
Taxes		375.00	
Bills payable		1,000.00	
Accounts payable (book accounts)	$3,550.00		
Accounts payable on account of accommodation	48,000.00	51,550.00	58,175.00
Liabilities not Liquidated:			
Accounts payable (renewed notes)			10,000.00
			$180,175.00

Liabilities to be Liquidated:			
Bills payable		$1,000.00	
Accounts payable (including accommodation)		61,550.00	
Taxes		375.00	
Mortgage on real estate		5,000.00	
Mortgage interest (accrued to Jan. 1, 19—)		250.00	$68,175.00
Assets Realized:			
Bills receivable		$4,400.00	
Accounts receivable:			
Book Debts	$3,600.00		
Accommodation	43,500.00	47,100.00	
Merchandise inventory		10,000.00	61,500.00
Assets not Realized:			
Merchandise inventory		$10,000.00	
Real estate		25,000.00	35,000.00
Loss on Realization proper			15,500.00
			$180,175.00

TRUSTEE'S OPERATION AND SUBSEQUENT TRANSACTIONS

Supplementary Charges:			Supplementary Credits:		
Inventory consumed	$10,000.00		Cash sales for the year	$108,000.00	
Purchases	70,000.00		Sales on account	2,000.00	$110,000.00
Clerk hire, wages, etc.	1,620.50				
Legal fees and petty expenses	2,400.00				
Interest on mortgage	250.00				
Trustee's commission	5,000.00	$89,270.50			
Profit on operation		20,729.50			
		$110,000.00			$110,000.00

RECAPITULATION

Loss on realization	$15,500.00	Profit on operation	$20,729.50
Ordinary profit resulting (carried down)	5,229.50		
	$20,729.50		$20,729.50
Green's allowance	$1,200.00	Ordinary profit (brought down)	$5,229.50
Sharp's allowance	1,200.00		
Interest on Maxwell's capital	600.00		
Interest on Green's surplus	379.50		
Net profit, available for distribution	1,850.00		
	$5,229.50		$5,229.50

TRUSTEE'S CASH ACCOUNT

Receipts:

To balance on hand Jan. 1, 19—		$500.00
Cash sales during the year	$108,000.00	
Accounts receivable (old book accounts)	3,600.00	
Accounts receivable (accommodation)	43,500.00	
Bills receivable	4,400.00	159,500.00
		$160,000.00
To balance on hand, Dec. 31, 19—		$19,175.00

Payments:

By purchases of merchandise	$70,000.00	
Accounts payable (accommodation)	48,000.00	
Accounts payable (old book accounts)	3,550.00	
Bills payable	1,000.00	
Legal fees and other petty expenses	2,400.00	
Mortgage on real estate	5,000.00	
Interest at 5% (2 years)	500.00	
Taxes	375.00	$130,825.00
Clerk hire, wages, etc	$1,620.50	
Green's allowance	1,200.00	
Sharp's allowance	1,200.00	
Interest on special partner's balance	600.00	
Interest on Green's surplus capital	379.50	
Trustee's commission	5,000.00	10,000.00
Balance on hand		19,175.00
		$160,000.00

BALANCE SHEET OF THE FIRM GREEN AND SHARP AS ON DECEMBER 31, 19—

ASSETS:			LIABILITIES:	
Cash	$19,175.00		Notes payable	$10,000.00
Accounts receivable	2,000.00			
Merchandise inventory	10,000.00	$31,175.00	PROPRIETORSHIP:	
Real estate		25,000.00	Combined capital as per capital accounts	46,175.00
		$56,175.00		$56,175.00

SAMUEL GREEN'S CAPITAL ACCOUNT

To balance December 31	$21,157.50	By balance January 1	$20,325.00
		One-half of profits (after providing Maxwell's 10%).	832.50
	$21,157.50		$21,157.50
		By balance December 31	$21,157.50

JAMES SHARP'S CAPITAL ACCOUNT

To balance December 31	$14,832.50	By balance January 1	$14,000.00
		One-half of profits (after providing Maxwell's 10%).	832.50
	$14,832.50		$14,832.50
		By balance December 31	$14,832.50

HENRY MAXWELL'S CAPITAL ACCOUNT

To balance December 31	$10,185.00	By balance January 1	$10,000.00
		One-tenth of profits	185.00
	$10,185.00		$10,185.00
		By balance December 31	$10,185.00

must evidently infer that the partnership agreement provided for such charges prior to the distribution of the net profits. This ordinary net profit is therefore brought down, and against it the allowance to the partners as well as the interest on capital is charged. The result shows the net profit available for distribution to be $1,850.

While there is not much difference between these methods, the latter takes the view that the solution showing supplementary charges and credits of the trustee's operation, is nothing but a profit and loss account. It shows the profit made or loss sustained on the operation.

Another point to be noticed is that in the solution of this problem the cash item has been eliminated. This was done in order to give the reader the benefit of the various views that are possible in the solution of such or similar problems.

The trustee's cash account shows the cash received from various sources as well as the cash payments.

We are told that the amount paid for clerk hire, wages, partners' allowances, etc., amounts to $10,000. The cash payment side shows these payments in itemized form. As the partners' allowances with interest, as well as the trustee's commission, amount to $8,397.50, the amount paid for clerk hire, wages and petty expenses must have been $1,602.50. That explains this figure shown on the cash payment side and accounts for the balance of cash on hand being $19,175.

The balance sheet shows the assets consisting of cash, the outstanding accounts on the trustee's operation ($2,-000), inventory and real estate, amounting in total to $56,175. The liabilities consist only of notes payable and amount to $10,000. They represent the renewal on accommodation papers. That leaves a balance for pro-

prietorship representing the above capital and amounting to $46,175.

The partners' accounts are given separately in order to explain the distribution of profits, wherefore only the total capital is shown in the balance sheet.

253. *Insolvency accounts*[1].—We have so far treated of solvent accounts only. In the case of the realization and liquidation accounts we also had cases of temporary embarrassments, but not of insolvencies. The special points that often arise in connection with accounts relating to the estates of insolvent persons, have their origin in the requirements of the bankruptcy law with regard to persons administering these trusts.

The trustee in the case of realization affairs treated the business as a going concern. He continued operations not for the purpose of winding up the affairs of the firm, but in order to put them on a firmer basis. He looked mainly to the welfare of the creditors of the firm, and when he saw their claims were fully satisfied or at least reasonably well secured, he surrendered his trust. The estate reverted to the owners under their exclusive control and management as before the appointment of the receiver. But the trustee appointed in the case of insolvent estates is not appointed for the purpose of strengthening the condition of the firm but to wind up its affairs. He is to continue operations only under certain circumstances, namely when there are contracts to be completed. He sells all the assets, and upon their realization liquidates the liabilities and pays the creditors their pro-rata.

Under normal conditions the object of any system of bookkeeping is to produce, at regular intervals or whenever required, a statement showing the financial position

[1] See Vol. XII, "Commercial Law."

at that date in the form of a balance sheet, and also an account showing the various sources of income, expenditure or loss, that have contributed to the change in the condition of the firm as compared with the previous period. The latter account is frequently divided into several sections, known collectively as the profit and loss or revenue account.

When an estate is found to be insolvent, somewhat similar accounts, although different in substance, are prepared. Owing to the special circumstances of the case, certain changes of detail in the form of the accounts are necessary for the purpose for which they are required. Thus, in place of the balance sheet showing on one hand the assets and on the other the liabilities—the excess of the former over the latter representing proprietorship—the statement required is one that will afford unsecured creditors some idea of the amount of their claims in the aggregate and of the amount of net assets available to meet such liabilities. Accordingly, the balance sheet form must be so modified that all assets pledged as security for liabilities appear not as assets but as deductions from the claims of secured creditors. If a creditor is fully secured, the surplus value of that asset so pledged, after liquidating his claim only, appears as an asset, while if he is only partly secured, the unsecured balance of his claim alone appears as a liability against the general assets.

254. *Preferential claims.*—Another thing to be noticed in this class of accounts is that there are certain grades of creditors who are by law entitled to be paid in priority of the general creditors of the firm. These are known as preferential creditors. The claims of these creditors are stated separately and are deducted from the assets. Such claims are debts due to the national,

state or municipal government, wages and salaries of employés—to the extent that the law provides that they shall be paid out of the estate before the general distribution is made—or rent of the premises where the assets of the estate are located.

A prepared statement showing all such facts is known as a "statement of affairs." This statement is divided to show on the one hand the net total of assets which (subject to probable loss on realization and costs) is available for distribution among creditors, and on the other hand the total unsecured liabilities that are expected to rank against the assets for dividends. The excess of the latter figure over the former is the deficiency which the insolvent debtor has to account for. It has already been noted that the statement of affairs in many instances is identical with the balance sheet excepting, of course, the purpose for which it is prepared as well as the result shown.

The deficiency account is similar to the profit and loss account with certain modifications. It must be borne in mind that this account is prepared in order to explain the causes and reasons for the deficiency shown in the statement of affairs. This modified account (deficiency account) differs from the profit and loss account chiefly in that it begins with an opening balance representing the amount of surplus assets of the insolvent firm at some previous period. To this amount are added all sources of profit that have increased the total amount to be accounted for. On the other side of the account are stated all the expenditures of the insolvent firm as well as all losses incurred by it, so that the balance of this account is the same amount of deficiency as shown by the statement of affairs.

As to the form of presenting a statement of affairs or

deficiency account, the practice varies a great deal. Some would arrange the statement of affairs to show on the left hand side the liabilities and on the right hand side the assets. The deficiency account would be arranged to show on the left hand side the capital and deficiency, and on the right hand side shrinkages and losses. Others arrange the assets on the left hand side of the statement of affairs and the liabilities on the right hand side; the deficiency account would be arranged in the form already mentioned. Still others change the deficiency account to show on the left hand side shrinkages and losses and on the right hand side capital and deficiency. The following concrete illustration will show the handling of such accounts.

255. *Insolvency case illustrated.*—Jones and Robinson, merchants, are unable to meet their obligations. From their books and the testimony of the insolvent debtors the following statement of their condition is ascertained:

Cash on hand	$5,500.00
Debtors: $1,000.00 good; $600.00 doubtful, but estimated to produce $200.00; $1,000.00 bad	2,600.00
Property, estimated to produce $9,000.00	14,000.00
Bills receivable, good	4,250.00
Other securities: $3,000.00 pledged with partially secured creditors; remainder held by fully secured creditors	28,000.00
Jones, drawings	9,000.00
Robinson, drawings	8,400.00
Sundry losses	13,500.00
Trade expenses	7,400.00
Creditors, unsecured	25,000.00
Creditors, partially secured	23,900.00
Creditors, fully secured	17,000.00

STATEMENT OF AFFAIRS, DECEMBER 15, 1896, JONES & ROBINSON

Assets:		Nominal Value	Expected to Realize	Liabilities:		Total Liabilities	Expected to Rank
Cash on hand		$5,500.00	$5,500.00	Creditors, unsecured		$25,000.00	$25,000.00
Property		14,000.00	9,000.00	Creditors partly secured	$23,900.00	23,900.00	
Sundry Debtors:		2,600.00		Securities at estimated value	3,000.00		20,900.00
Good	$1,000.00			Creditors fully secured	17,000.00	17,000.00	
Doubtful	600.00		1,200.00	Securities at estimated value.	25,000.00		
Bad	1,000.00						
Bills receivable		4,250.00	4,250.00	Surplus to contra	$8,000.00		
Other securities in the hands of creditors		28,000.00		Preferential creditors, for wages, salaries, taxes, etc.			
Partly secured	$3,000.00			Deduct contra	700.00	700.00	
Fully secured	25,000.00						
Deducted contra	$28 000.00						
Surplus from securities in the hands of creditors fully secured per contra			8 000.00				
			$27,950.00				
Deduct preferential creditors, for wages, salaries, taxes, etc., per contra			700.00				
			$27,250.00				
Deficiency, as per deficiency account			18,650.00				
		$54,350.00	$45,900.00			$66,600.00	$45,900.00

DEFICIENCY ACCOUNT JONES & ROBINSON

To capital brought into the business at commencement, and since, viz.:			By losses on trading, viz.:		
Jones, capital	$10,000.00		Sundry losses	$13,500.00	
Robinson, capital	16,050.00	$26,050.00	Trade expenses	7,400.00	$20,900.00
Deficiency as shown by statement of affairs		18,650.00	Losses and shrinkage in values, as exhibited by statement of affairs,		
			Property	$5,000.00	
			Debtors, doubtful	400.00	
			Debtors, bad	1,000.00	6,400.00
			Drawings from business, viz.:		
			Jones, drawings	$9,000.00	
			Robinson, drawings	8,400.00	17,400.00
		$44,700.00			$44,700.00

Preferential claims, wages, salaries and taxes......	700.00
Jones, capital	10,000.00
Robinson, capital	16,050.00

The statement of affairs shown on page 391 is arranged to disclose the exact status of the firm on the date of December 15th. The left hand side of the statement shows in one column the nominal or book value of the assets. The second column shows the amount we expect these assets to realize. We are not much interested in the book value of the assets, but we are interested to know how much we may expect to realize from the assets. The total of this column after deducting the preferential claims is $27,250. On the right hand side of the statement are shown the liabilities. We have here also two columns, one showing the total or book liabilities and the other the amount which the liabilities are expected to rank. It will be noticed that the secured creditors are omitted entirely. This is because they are not expected to rank to any amount since they are fully secured. The creditors partially secured are shown in the total liabilities column for the full amount, while in the column "expected to rank" only $20,900 as the securities in their possession as part pledge are estimated at $3,000. Preferential claims are entered only in the total liability column because these have been deducted from the total assets. The total of the column "expected to rank" amounts to $45,900. As the assets available for distribution amount to only $27,250, we have a deficiency of $18,650, which is accounted for and explained in the deficiency account shown on page 392.

This account begins on the debit side with the capital brought into the business at commencement, amounting to $26,050. On the credit side are entered the losses on trading as given in the facts, as well as the trading

expenses, making the total $20,900. The second part on the same side deals with the losses and shrinkages in values as shown by the statement of affairs. This amounts to $6,400. Finally are entered the withdrawals amounting to $17,400. We have against this only the capital, amounting to $26,050, hence there is a deficiency amounting to $18,650, which is the exact sum shown on the statement of affairs.

256. *Another illustration.*—Parker and Riley, being unable to meet their obligations, have made an assignment. You are asked to prepare a statement of their affairs for presentation at a meeting of their creditors. Some of the creditors are entirely or partially secured, the security being a part of the assets. It is desired to ascertain the true condition of the assets with reference to realization, and the extent of the deficiency with respect to liquidation. Prepare also in connection with the statement of affairs a deficiency account, explaining the deficiency shown in the statement of affairs. Following is a trial balance of their ledger at the date of the assignment:

Cash on hand and in bank	$1,200.00
Stock and material (inventory from prior period)	12,000.00
Reliance Trust Company stock, 20 shares at cost	2,200.00
Accounts receivable	10,550.00
Notes receivable	2,000.00
Mortgage receivable (second) on 194 Front Street	1,000.00
Real estate (store building and lot)	14,000.00
Fixtures	1,700.00
Horses, trucks and harness (property account)	1,400.00

Accounts payable		$28,000.00
Loans payable		7,000.00
Mortgage payable (on store building and lot)		5,000.00
Purchases	30,000.00	
Sales		36,000.00
Rents		1,200.00
Salaries	3,500.00	
Interest and discount	960.00	
Taxes, insurance and building repairs	1,240.00	
General expenses	2,650.00	
Parker's capital		8,000.00
Riley's capital		4,000.00
Withdrawals, Parker	3,000.00	
Withdrawals, Riley	1,800.00	
	$89,200.00	$89,200.00

The accounts receivable are divided as: good, $8,000; doubtful, $1,500 (estimated to produce $1,000); worthless, $1,050. Notes receivable are estimated to realize $1,800; the second mortgage is estimated to produce $800; the trust company shares $1,800; the horses, trucks and harness, $900; fixtures, $1,000; store building and lot, $12,500.

Of the amount due creditors (accounts payable) $20,000 is unsecured and $8,000 is secured by the second mortgage and trust company stock. The loans payable are secured by the equity in the store, building and lot.

The inventory of merchandise on hand, which foots $5,000, is expected to realize $3,000. Other liabilities are employés' wages, $550, and accrued interest on mortgage, $125.

257. *Schedules explained.*—We have so far shown only the statement of affairs and the deficiency account.

PROFIT AND LOSS ACCOUNT OF THE FIRM PARKER & RILEY, COVERING THE PERIOD UP TO DATE OF THE ASSIGNMENT

Inventory prior period	$12,000.00	Inventory goods on hand	$5,000.00
Purchases	30,000.00	Sales	36,000.00
Salaries	3,500.00	Rents	1,200.00
Interest and discount	960.00	Loss excluding depreciation or other reserves	8,150.00
Taxes, etc.	1,240.00		
General expenses	2,650.00		
	$50,350.00		$50,350.00

BALANCE SHEET OF THE FIRM PARKER & RILEY, ON DATE OF ASSIGNMENT

Assets:			
Cash on hand and in bank		$1,200.00	
Reliance Trust Company stock (20 shares)			$2,200.00
Notes receivable	$2,000.00		
Accounts receivable	10,550.00	12,550.00	
Inventory of merchandise		5,000.00	18,750.00
			$20,950.00
Real estate		$14,000.00	
Mortgage receivable		1,000.00	
Fixtures		1,700.00	
Horses, trucks, etc.		1,400.00	18,100.00
			$39,050.00
Riley's excess withdrawals			950.00
			$40,000.00

Liabilities:				
Loans payable			$7,000.00	
Accounts payable			28,000.00	$35,000.00
Mortgage payable				5,000.00
				$40,000.00
Proprietorship:				
Parker's previous capital		$8,000.00		
Deduct:				
One-half of losses	$4,075			
Withdrawals	3,000	7,075.00	$925.00	
Riley's previous balance			4,000.00	
Deduct:				
One-half of losses	$4,075			
Withdrawals	1,800	$5,875.00		
Debit excess		$1,875.00		
Deduct Parker's credit balance		925.00		
Contra		$950.00		
				$40,000.00

STATEMENT OF AFFAIRS PARKER AND RILEY

Nominal Value	Assets		Estimated to Produce
$1,200.00	Cash		$1,200.00
8,100.00	Property as per schedule A		4,900.00
10,550.00	Accounts receivable, as per schedule B		
	Good	$8,000.00	8,000.00
	Doubtful	1,500.00	1,000.00
	Bad	1,050.00	
2,000.00	Notes receivable		1,800.00
17,200.00	Other assets in hands of creditors, as per schedule C		
	Surplus in hands of fully secured creditors, schedule F		375.00
	Total Assets		$17,275.00
	Deduct preferred claims as per contra		550.00
			$16,725.00
	Deficiency as per deficiency account		8,675.00
$39,050.00			$25,400.00

Total	Liabilities		Expected to Rank
$20,000.00	Creditors unsecured as per schedule D		$20,000.00
8,000.00	Creditors partly secured, as per schedule E	$8,000.00	
	Deduct security	2,600.00	5,400.00
12,125.00	Creditors fully secured, as per schedule F	12,125.00	
	Store and lot	12,500.00	
	Surplus to contra	375.00	
550.00	Preferred creditors. Wages due, deducted contra	550.00	
$40,675.00			$25,400.00

DEFICIENCY ACCOUNT, PARKER AND RILEY

Dr.			Cr.		
Capital:			Trading losses, as per profit and loss account		$8,150.00
Parker	$8,000.00		Sundry losses, interest due	$125.00	
Riley	4,000.00	$12,000.00	wages due	550.00	675.00
Deficiency as per Statement of Affairs		8,675.00	Shrinkage in value of assets		7,050.00
			Withdrawals:		
			Parker	3,000.00	
			Riley	1,800.00	4,800.00
		$20,675.00			$20,675.00

SCHEDULE A

Property

	Nominal Value	Estimated to Produce	Shrinkage
Stock and materials	$5,000.00	$3,000.00	$2,000.00
Horses, trucks, etc	1,400.00	900.00	500.00
Fixtures	1,700.00	1,000.00	700.00
	$8,100.00	$4,900.00	$3,200.00

SCHEDULE B

Customer's Accounts

(Omitted in this case)

Good	$8,000.00	
Doubtful	1,500.00	
Bad	1,050.00	$10,550.00

SCHEDULE C

Other Assets

Store and lot	$12,500.00	
Second mortgage	800.00	
Trust Company stock	1,800.00	
	$15,100.00	
Shrinkage in value	2,100.00	$17,200.00

SCHEDULE D

Unsecured Creditors

Sundry creditors		$20,000.00

SCHEDULE E

Partly Secured Creditors

Sundry creditors		$8,000.00
Second mortgages expected to realize	$800.00	
Trust company stock	1,800.00	2,600.00
		$5,400.00

SCHEDULE F

Creditors Fully Secured

Loans payable	$7,000.00	
Mortgage payable	5,000.00	
Interest payable	125.00	$12,125.00
Security:		
Store and lot		12,500.00
Equity		$375.00

The usual practice, however, is to accompany such statements with exhibits. In the preceding problem the statement of affairs is arranged in somewhat different form from that illustrated in the previous case—so also the deficiency account—in order to give the reader the benefit of some other possible view. The usual statements are also accompanied with schedules to which reference is made in the statement of affairs.

Our first step in this solution is to show the result of operation up to the date of the assignment. We therefore prepare the profit and loss account shown on page 396.

It will be noticed that this account is not prepared strictly according to the principles advocated previously. It is not subdivided nor classified. If we bear in mind that it is prepared only in order to show the loss sustained, and that the affairs are closed out, the reason for the arrangement will be quite clear.

The balance sheet on page 399 shows the financial condition of the firm. Riley has withdrawn $1,800 and his share of the losses was $4,075. That makes a total of $5,875. His capital in the firm was $4,000, hence he was overdrawn $1,875. As Parker's account shows a credit of $925, there remains a debit balance of only $950.

PART IV: SPECIAL TOPICS

CHAPTER XXV

DEPRECIATION AND OTHER RESERVES

258. *Importance of depreciation.*—Frequent reference has been made to the necessity of opening accounts for depreciation of the assets owned by a business concern. Strangely enough, it has only been within recent years that the business man has realized the wisdom of considering depreciation as part of the expenses. In the early books on accounting no mention at all was made of the subject. Indeed, when the matter was first broached to business men, they regarded it with derision. Even today there are business men who calmly dismiss the subject with the remark that it is merely academic and theoretical.

It may be recalled how the underwriting syndicate which had undertaken to reorganize the Rock Island Companies collapsed a few years ago. Its plans were to issue a 7 per cent preferred stock on the basis of an 8 per cent income. To the dismay of the members of the syndicate, the Interstate Commerce Commission ruled that all the railroads under its control must include as a charge against their profits a satisfactory percentage of the railroad equipment, such percentage representing the estimated depreciation of the property. As a result of this ruling, the income of the Rock Island Companies referred to, actually fell to 3½ per cent—plainly insufficient to warrant the issue of a 7 per cent stock.

It had been the practice of some railroad companies to include among their maintenance expenses a charge for depreciation. Other transportation companies, however, though recognizing the theory, continued to disregard it. They made good the actual loss of equipment through wear and tear by throwing out the old and borrowing money for new equipment. In the case just cited, depreciation proved at any rate important enough as a factor to upset the plans of a powerful syndicate.

Depreciation is always an important factor in the management of an enterprise. More than one concern has been thrown into bankruptcy simply because it distributed from time to time as profits what, as a matter of fact, was part of the fixed assets.

259. *Simplicity of depreciation theory.*—The theory of depreciation is so simple that it seems incredible that any business man should disregard it. Assume that an enterprise has been in existence for ten years, during which time its sales are $1,000,000, and its purported expenses (not including depreciation) $500,000. But at the end of that period, the machinery is in such a state as to be almost worthless, although it has been repaired from time to time. These repairs have been included among the operating expenses. The cost of the machinery in the beginning, let us say, was $200,000. Are we still justified in claiming a profit of $500,000? Certainly the machinery was "consumed" in the manufacture of the articles sold, just as was the raw material. What difference is there between the consumption of raw material and machinery?

From this example we rightly infer that depreciation is the term given to that portion of an asset which is consumed in the operation of a business. Nor need this consumption be due directly to wear and tear through

use. In fact, a machine may remain idle and eventually become useless by reason of the invention of a superior piece of mechanism. Its loss to the concern, nevertheless, is depreciation—in this case, depreciation as a result of obsoleteness.

260. *Depreciation not offset by appreciation.*—The question is often raised whether depreciation charges should be made, even if at the time offset by appreciations of assets. Mr. Teichman, in *The Journal of Accountancy,* contends that even when the natural growth of the population, as in the case of a street railway, increases the earning power of the plant sufficiently to offset any depreciation of its physical condition, the proper amount of depreciation should be written off. While this to some might seem over-scrupulous, nevertheless, it is the only safe policy to pursue.

261. *Argument against opposite opinion.*—Others take an opposite stand and assert that inasmuch as the sole function of the balance sheet is to reflect the financial condition of the company, it should represent the values as they actually are. Accordingly, when appreciation charges offset depreciation charges, the latter should be ignored.

Against this opinion it may be said that depreciation is an actual fact—whether the rate at which it is fixed be correct or not; whereas appreciation necessarily remains a doubtful factor until the asset is sold, when it may or may not be realized. We cannot claim a profit as a result of appreciation. Unless a sale takes place and such a sale produces an excess over the cost of the asset, there is no profit realized. We have already presented arguments against "paper profits." [1]

262. *How to provide for depreciation.*—Admitting

[1] See Chapter III.

the importance of making due provision for depreciation, the next question is as to the exact method to be adopted in order to achieve that purpose. The essential point is that the profit and loss account be charged with a proper sum to cover the depreciation in the value of the assets and that the apportionment of such charge between one year and another should be upon some equitable basis. This, of course, involves a debit to profit and loss and a corresponding credit to some other account.

In England it is the practice to credit the assets directly with the sum charged to profit and loss as depreciation. In America this charge is credited to a separate account "reserve for depreciation." Generally, the title of the account clearly indicates the asset to which the depreciation applies, thus: "reserve for depreciation of plant and machinery"; "reserve for depreciation of horses and trucks," etc.

Under the English method the value of the asset is gradually written down in the books to correspond with the depreciation in its intrinsic value. Under the American method, the asset account remains unaltered, as any deduction from the assets is shown in a separate account. In framing a balance sheet, however, it is advisable that the depreciation be deducted from the assets rather than entered as a liability on the opposite side of the balance sheet, thus:

Plant and machinery	$50,000.00	
Less 5 per cent depreciation...	2,500.00	$47,500.00

This method was not adopted in the balance sheet employed in the various illustrations in previous chapters, since our object was to avoid at that stage the possibility of creating confusion in the reader's mind.

263. *Distinction between reserve fund and reserve account.*—The reserves just referred to are known as reserve accounts. Distinction is made between a reserve account, on the one hand, and a reserve fund, on the other. The former is a credit account, while the latter is a debit account and actually represents an asset. A reserve fund is created when the management actually takes out of its operating assets a definite sum—usually, though not necessarily, equal to the credit in the reserve account—and places it in a separate bank account or invests it in certain interest-bearing securities. The common practice, however, is to let the amounts represented by the reserve accounts remain in the business, under the assumption that they can be made to yield a larger return than if otherwise invested. The chief reason for taking the reserve out of the business is to insure its being available when needed—incidentally also to create a feeling of confidence on the part of owners as to the conservatism of the management.

264. *Ledger accounts for depreciation illustrated.*—Suppose that a plant originally cost $100,000 and that the plant accounts on the ledger were so charged. From the time the business was started the profit and loss account has been charged with a certain rate of depreciation, so that after fifteen years of operation a reserve for depreciation amounting to $80,000 has been accumulated. The plant is then sold for $10,000, indicating that the reserve lacks $10,000 of covering the actual shrinkage. The cash received for the plant as it now exists is immediately credited to the plant account, which is further credited with the $80,000 reserve that had been accumulated. This amount then is charged to the reserve account, thereby wiping out the reserve. The remaining $10,000 should, of course, be charged against

accumulated profits, since the loss is not chargeable to the current year's operation, but was actually distributed over the entire life of the plant. The surplus accumulated during that time, therefore, should bear the burden. The entries in journal form without explanatory notes would be as follows:

Cash	$10,000.00	
Plant		$10,000.00
Reserve for depreciation of plant...	$80,000.00	
Plant		$80,000.00
Surplus	$10,000.00	
Plant		$10,000.00

Suppose, now, that a reserve fund had been set aside; that is, that each year as a sum was transferred from profits to the reserve account for depreciation of plant an equal sum has been taken out of the assets and invested in some security.

When the plant was sold, the management—especially if a new plant were to be acquired—would liquidate this fund. Assuming that the fund realized exactly $80,000, we should charge cash and credit reserve fund. There would then be available $80,000 with which to purchase a new plant, in which case we should, of course, credit cash and charge the plant account with the cost. The entries shown, however, would remain the same.

265. *What amount shall be charged to profit and loss for depreciation?*—Obviously, the most important problem under the subject of depreciation is that of finding the proper rate to be charged off during each accounting period against the profits for that period. Whenever

the amounts so charged off actually are equal to the depreciation that takes place, as determined at the sale of the assets at some later time, we have to deal with a coincidence, not with any scientifically accurate method of determining the rate. Expert accountants and appraisers have yet to find a method of determining a periodical rate of depreciation which is anything more than an estimate. In the great majority of cases the reserve set aside for depreciation either falls short of the actual depreciation or exceeds it.

Depreciation itself is measured by the difference between the cost of the asset to be depreciated and its residual value—its scrap value. This difference must be spread out over the life of the asset which, obviously, must be estimated in the beginning. This estimate, together with that of the price which the asset will bring as scrap, are the two important, though uncertain, factors which render impossible any accurate method of determining the depreciation rate.

In Hatfield's "Modern Accounting" several excellent methods are described. We quote the author as saying:

266. *Equal annual charges.*—The simplest method is to divide the total depreciation by the number of years' use, and charge the quotient as annual depreciation, or in other words to charge each year a fixed per cent of the original cost. Thus a machine costing \$600, expected to last five years, at which time it will have a residual value of \$100, should each year have a charge of \$100 or $16\frac{2}{3}$ per cent of its cost to depreciation. Expressed algebraically,

$$D = \frac{V_1 - V_2}{n}$$

in which D represents the amount of annual depreciation, V_1 equals the cost price, V_2 the residual value, and n the number of years.

The advantage of this method is the extreme simplicity and the ease with which it can be estimated. For short-lived assets it is doubtless to be preferred. Objection is sometimes made that it requires constant reference to the original cost price. If depreciation is directly subtracted from the book value of the asset by crediting the amount to the ledger account in which the asset appears, this defect is of some significance, necessitating repeated reference to the value no longer exhibited by the accounts. But where a separate depreciation account is established and the original cost remains an integral part of the accounts, the criticism fails.

267. *Declining balance method.*—A second method is to charge a fixed percentage of the decreasing net value. This gives not a constant, but a diminishing annual charge for depreciation. In the instance given above the depreciation instead of being $16\frac{2}{3}$ per cent of the original cost, would be 30.12 per cent of the diminishing net value. The annual charges would, therefore, be as follows:

Year	Value at Beginning of Year	Depreciation at 30.12% of Diminishing Value
1	$600.00	$180.72
2	419.28	126.28
3	293.00	88.25
4	204.75	61.67
5	143.08	43.09
Residual value	99.99	......

Expressed algebraically, the formula is:

$$V_1 \,(1-r)\,(1-r)\,(1-r)\,(1-r)\,(1-r) = V_2$$

in which r represents the percentage of the diminishing value to be annually deducted for depreciation, and V_1 and V_2 represent, as before, the initial and the residual value of the asset. Hence is derived as a working formula:

$$r = 1 - \sqrt[n]{\frac{V_2}{V_1}}$$

which is easily solved by the use of logarithmic tables. It should be noted that this formula cannot strictly be applied where the asset has no residual value, that is, where $V_2 = 0$, as, for instance, in a terminable leasehold, or an expiring patent right. Practically it is applied even in such cases by assuming a nominal sum, say one dollar, or one cent, as the residual value. It will further be noted that because of the elimination of fractions the balance worked out generally will not exactly correspond with the assumed residual value of the asset, but as, at best, depreciation is a matter of estimate, such small divergences are of no significance.

The advantage of this method, in addition to its easy application to accounts showing the depreciated value of the asset, is that it makes the charge for depreciation less with each additional year. The argument in favor of this course is that in the earlier years the charges for repairs will be slight, but these will increase as the machine becomes older. As both repairs and depreciation are a charge to expenses of production, the increasing repairs and the decreasing depreciation make a uniform charge to expense, and thus profits are more equally apportioned between the several years during which the machinery is used. Furthermore, a declining depreciation is thought to correspond better with the economic facts. The difference in value of a new machine and one that is one year old is probably much greater than the difference in value of a machine which has been used nineteen years and the same machine a year later. Thus Tiffany estimates that machinery in a flour mill depreciates 12½ per cent of its cost the first year, 8 in the second, 5 in the third, 2½ in the fourth, and only 2 per cent each year thereafter. This decreasing rate of depreciation is preserved by figuring depreciation as a percentage of the diminishing value. The objections to this method are obvious. It involves a complicated mathematical calculation, and the

annual rate of depreciation gives little indication to the ordinary man of the period required to write off the asset. Furthermore it increases the depreciation charge in the earlier years, and in the case of a new concern this may be distasteful as being an additional charge against profits at a time when business has not come into full swing and profits are low.

268. *Annuity method.*—A third method, known as the Annuity Method, is even more complicated. It rests upon the assumption that the cost of production includes not only repairs and the depreciation of machinery, but as well interest on the amount of capital invested in the machine. Depreciation on this theory should be a sum figured as a constant annual charge sufficient not only to write off the decline in value, but also to write off annual interest charges on its diminishing value. Assuming the rate of interest to be six per cent the reckoning should show:

MACHINERY ACCOUNT

Dr.			Cr.
Cost price	$600.00	Depreciation	$124.70
Interest at 6%	36.00	Balance	511.30
	$636.00		$636.00
Balance	$511.30	Depreciation	$124.70
Interest	30.68	Balance	417.28
	$541.98		$941.98
Balance	$417.28	Depreciation	$124.70
Interest	25.04	Balance	317.62
	$442.32		$442.32
Balance	$317.62	Depreciation	$124.70
Interest	19.06	Balance	211.98
	$436.68		$436.68
Balance	$211.98	Depreciation	$124.70
Interest	12.72	Balance	100.00
	$224.70		$224.70
Balance	$100.00		

Algebraically the formula is derived as follows:

$$(V_1 R{-}D)\ (R{-}D)\ (R{-}D)\ (R{-}D)\ (R{-}D) = V_2$$

in which R equals 1 + (the rate of interest), or in this case 1.06 and D the annual charge for depreciation.

Hence

$$V_1 R^5 - D\ (R^4 + R^3 + R^2 + R + 1) = V_2$$

or in simpler form:

$$D\ \frac{R^5 - 1}{R - 1} = V_1\ R^5 - V_2$$

and

$$D = V_1\ R^5 - V_2 \div \frac{R^5 - 1}{R - 1}$$

or generally:

$$D = V_1\ R^n - V_2 \div \frac{R^n - 1}{R - 1}$$

These values are obtained easily by the use of logarithms, or still more simply by the use of actuarial tables prepared for the use of insurance companies; for evidently V_1R^n is the accumulated value of V_1 at 6 per cent compound interest for n years, and the coefficient of D is the accumulated value at 6 per cent interest of an annuity of one dollar paid at the end of each of n years. Such values are given in ordinary actuarial tables.

The use of this system implies that at the time interest is charged to the plant there is a corresponding credit to interest account. Consequently the net result to Profit and Loss account taken as a whole is that there is an equal annual charge of depreciation, and a diminishing annual credit for interest.

An objection to the last-named method is that it introduces the custom of marking up the value of assets by an allowance for assumed interest. In this particular case no inflation of profits results because there is an increased charge against profits for depreciation. But it is questionable whether it is not so dangerous a practice as to make objectionable anything

which seems to justify it. Furthermore, unless interest is charged on all capital invested, not merely on that subject to depreciation, there is a logical inconsistency in reckoning it in depreciation. And finally, its value consists in separating the profits of manufacturing, or other business operations, in which depreciation assets are used, from the profits derived from the use of capital. This is so because the large depreciation charge goes into the Trading account, while the countervailing credit to interest goes into the Profit and Loss account proper.

269. *The three methods compared.*—The three methods of figuring depreciation have this marked difference. The annual charge against profits decreases where depreciation is a fixed percentage of the diminishing value of the asset. It is constant where depreciation is a fixed percentage of the cost; it increases where the third method is used. A comparison of the amount annually charged to depreciation under each of the methods described is shown by the following table:

DEPRECIATION OF ASSET COSTING $600 WITH ESTIMATED RESIDUAL VALUE AT END OF FIVE YEARS, OF $100.00

Year	20% on Cost	30.12% on Diminishing Value	Annuity System, 6% Interest	
			Gross Charge	Gross, less Interest
1	$100	$180.72	$124.70	$88.70
2	100	126.28	124.70	94.02
3	100	88.25	124.70	99.66
4	100	61.67	124.70	105.64
5	100	43.08	124.70	111.98
Total	$500	$500.00	$623.50	$500.00

Authorities differ as to the desirability of one or other of the three methods. Dicksee's high authority favors the first for short-lived assets, the second for machinery in general, the third for long-time terminable leaseholds and similar assets. Where the courts prescribe depreciation they have generally

allowed the basis and, indeed, the period to be left to the discretion of the company authorities. Even in Germany where statute law is most precise, demanding that depreciation be reckoned, and in certain cases even prescribing the period, there is no legal preference given to one or other of the methods of calculation. Practice, however, in England, Germany, and the United States seems to favor, in general, the taking of the diminishing value of the assets as the basis of calculation. But the Interstate Commerce Commission definitely prescribes that, in figuring depreciation on the seven classes of equipment on which depreciation is compulsory, the first method, that of dividing the total shrinkage in value by the number of years of estimated life, shall be employed.

270. *Depreciation schedules.*—The practice in modern plants is to avoid establishing a fixed depreciation rate to apply to an entire plant. Instead the engineer will consider each machine or group of machines separately, establishing schedules of depreciation which are used in calculating at the close of each accounting period, the amount of depreciation to be set aside upon machinery. Schedules are also in use in some firms where the depreciation rate is based upon the plan taken collectively. The following tables, for example, are part of a set employed by one of the middle western public service companies:

WATER PLANT DEPRECIATION

ORIGINAL PLANT

Date Acquired	Cost	Estimated Life	Estimated Scrap Value	Annual Depreciation	
				Amount	%
1914...........	$198,000	25 years	$20,000	$7,120	3.6

WATER PLANT DEPRECIATION

BETTERMENTS

Date Acquired	Cost	Estimated Life	Estimated Scrap Value	Annual Depreciation	
				Amount	%
1905..........	$826.15	25 years	$80	$29.746	
1906..........	1,123.94	25 years	110	40.558	
1907..........	1,292.18	25 years	125	46.687	
1908..........	16,683.62	25 years	1,650	601.345	
1909..........	10,974.50	25 years	1,000	398.980	
1910..........	9,029.18	25 years	900	325.167	
1911..........	22,946.42	25 years	2,300	825.857	
1912..........	8,449.46	25 years	850	303.998	
1913..........	17,865.30	25 years	1,780	643.412	
1914..........	8,228.98	25 years	825	296.155	
1915..........	17,549.33	25 years	1,750	631.973	
1916..........	26,412.15	25 years	2,650	950.486	
Totals.......	$141,481.71		$15,120	$5,094.464	

271. *Various rates of depreciation.*—Obviously, no one would attempt to establish a rate of depreciation that would apply, for example, upon all machinery of a certain class in business industries, or in the same industry but in different plants. The conditions under which the machines are used vary so much that a standard rate is out of the question. It may, however, be of some value to the reader to be given some idea of the rates generally in use.

The minimum rate of depreciation on engines should be 7 per cent, and the maximum rate 12½ per cent per annum.

On boilers, assuming all the conditions to be favorable, the minimum rate of depreciation should be 10 per cent upon the reducing annual balance and the maximum rate 15 per cent.

On shafting, properly constructed so as to avoid undue friction, the depreciation rate should be 5 per cent per annum on the reducing balance. It should not ex-

ceed, however, 7½ per cent. Belting is to be excluded from this category and treated separately.

272. *Out-of-date machinery.*—Coming to the item of general machinery, of which there are numerous types, some machines are not likely ever to be entirely superseded, while others are likely to be replaced by modern inventions at an early date. As a general rule, however, the latter class would come under "special machinery." In an average factory, if all machinery be classed together, a 7½ per cent rate on the reducing balance will, as a rule, be sufficient for wear and tear, if the machinery be carefully worked and constantly kept in thorough repair. The maximum rate to be charged should be 10 per cent. Special machinery, as a rule, requires a very heavy depreciation, a minimum rate of 20 per cent and a maximum rate of 30 per cent.

273. *Tools, moulds and patterns, patents and copyrights.*—As a general rule, tools, which are also part of the plant, should be revalued, while moulds and patterns should be depreciated at a minimum rate of 25 per cent and a maximum rate of 33⅓ per cent. Patents and copyrights, while they have a legal existence for a specified period of years, are, owing to modern inventions and the rapid changes in industries, rarely used throughout their legal life. As a rule they are superseded after a period of a few years. The best plan to follow is to limit their existence on the books to half their legal life.

274. *Secret reserves.*—When a reserve is deliberately calculated in excess of the assumed loss or depreciation that is likely to occur under that particular heading, such excess constitutes a "secret reserve." This reserve is made to cover future hypothetical losses, and may be created by the under-valuation of assets or by the over-

stating of liabilities. Usually, however, reserves are provided for losses to exceed the expectations of the greatest pessimist. Such reserves are theoretically indefensible, because it is as improper to understate as it is to overstate the profitable nature of an undertaking. Nevertheless the practice is—within reasonable limits—prudent and is moreover generally countenanced by intelligent business men.

275. *The propriety of secret reserves.*—The propriety of creating a secret reserve is a matter of dispute among authorities. Thus, Mr. Pixley, in a paper read before the Congress of Accountants at the World's Fair at St. Louis in 1904, states the following:

> I am of the opinion that what are known as secret reserves are right and proper and tend toward the maintenance of the company as a permanent institution and that in fact without these secret reserves it is quite impossible, having regard to the fluctuations of both financial and trading operations, to exist beyond a very limited period. At the same time these reserves must be honestly made and in the interests of the company. For directors to create secret reserves with the object of withholding profits legitimately earned without distribution to the stockholders so as to induce them to dispose of their holdings, is as flagrant an act of dishonesty as can be conceived of.

If an enterprise is properly and conservatively managed it will provide reserves yearly to meet the peculiarities of its business. Secret reserves are not common in trading or manufacturing concerns, but they are often found in cases of banks and insurance companies.

276. *Sinking funds or debt extinguishment funds.*—There is one class of reserves which has caused and is causing a great deal of discussion—namely, sinking funds or debt extinguishment funds, to which refer-

ence has already been made. Lisle says that a sinking fund is one set aside out of assets and calculated at interest for the purpose of meeting a debt. Dicksee, on the other hand, makes a distinction between the sinking fund and the sinking fund account. He makes the latter a credit and the sinking fund a debit. He does not, however, explain why the debit is not just as much an account as the credit item is. Mr. A. Lowes Dickinson, in this connection, remarks as follows: "Sinking funds are not in theory a charge against profit and loss for the reason that they do not represent a loss or expense but the extinction of an existing liability. However, as in most cases the only source out of which such redemption fund can be provided is the surplus earnings, it is usual to insert a provision in trust deeds that the sinking fund is to be provided out of the profits of the year."

Many criticize the policy of charging sinking fund instalments against the profits, among them Mr. Seymour Walton, who writes as follows: [1]

> There is no essential accounting difference between bonds and ordinary bills payable secured by the deposit of collateral. The bonds run for a longer time and are more formal in character so that they may be easily transferred, but they are both promises to pay at a future time and nothing else. No one would think of charging the partial payments of a six months' note to revenue and there seems no adequate reason why such charge should be made when the note is divided into bonds and runs for perhaps forty times six months.

277. *Theory and practice of charging sinking fund at variance.*—So far as theory is concerned, the general practice of charging the sinking fund against revenue

[1] Journal of Accountancy, Vol. VI, p. 397.

is questionable, if not wrong. Nevertheless, there may well be doubts as to the propriety of changing this practice. The fact is that the majority of sinking fund mortgage agreements contain clauses to the effect that the fund is to be set aside out of profits. We may object to the clause and may do our best to avoid it, but to disregard definite instructions in so important a document is dangerous. Ignoring the conventional principles of accounting, the authors are inclined to believe that it is a desirable practice, since it tends to prevent directors from declaring excessive dividends out of profits, without making proper allowance for sinking fund payments.

278. *Place of a sinking fund in a company's books.*—Mr. Anyon clearly illustrates the position of a sinking fund in the books of a company. He gives the following illustration:[1]

A company starts business with a capital of $1,000,000.00, a bonded indebtedness of $250,000.00 and requisite plant, machinery and working capital, to enable it to do a profitable business. The bonds are 20 year bonds, bear 5 per cent per annum and the deed of trust stipulates that there shall be a sinking fund for the redemption of such bonds to be provided out of the profits of the company, of such an amount each year as invested at 4 per cent along with the interest accumulation will aggregate a fund at the end of the twenty years sufficient to redeem the bonds. According to this the company must invest out of its profits each year for sinking fund purposes the sum of $8,395.00, which is the correct amount on a 4 per cent basis and which becomes the annual sinking fund charge or installment. The company works successfully, earns an average profit of $90,000.00 per annum, after providing for depreciation, bad debt reserve, and all other expenses, pays dividends of 6 per cent per annum on its capital stock, and

[1]Journal of Accountancy, Vol. VII, p. 188.

regularly invests its sinking fund instalments as provided in the deed of trust. At the end of the twenty years it stands in the position as shown below.

This balance sheet clearly shows that the annual sinking fund instalments of $8,395.00 per annum have been regularly invested; that the income from these investments has in turn been invested; and that the aggregate of these is enough to pay the bonds at maturity. When this is done the balance sheet in other respects will stand just the same except that the sinking fund account and surplus will appear as one account.

The whole trouble arises from the fact that a general idea prevails that when profits are used for the benefit of a sinking fund they disappear forever, like payments for interest or for other fixed charges. This is incorrect. The profits have not gone, they have been used merely to pay a debt and as profits exist just the same only in another form of asset.

BALANCE SHEET

AT THE TIME WHEN THE SINKING FUND ACCUMULATIONS EQUALLED THE BONDED INDEBTEDNESS

Assets:			Liabilities:	
Patent rights, good-will, etc. .		$520,000.00	Capital..............	$1,000,000.00
Real estate, machinery, plant, etc.		650,000.00	Bonds...............	250,000.00
Inventory, accounts and cash.		330,000.00	Accts. payable........	150,000.00
Sinking fund investment acct.:			Sinking Fund account.	250,000.00
Investments out of earnings........	$167,900.00		Surplus profits........	100,000.00
Investments out of income	80,600.00			
Cash not invested......	1,500.00	250,000.00		
		$1,750,000.00		$1,750,000.00

BALANCE SHEET

AFTER REDEEMING THE BONDED INDEBTEDNESS

Assets:		Liabilities:	
Patent rights, good-will, etc..	$520,000.00	Capital..............	$1,000,000.00
Real estate, plant, etc.......	650,000.00	Accts. payable.......	150,000.00
Inventory, accounts and cash.	330,000.00	Surplus..............	350,000.00
	$1,500,000.00		$1,500,000.00

CHAPTER XXVI

CAPITAL AND REVENUE

279.—*Distinction between capital and revenue.*—Offhand, it would seem to be a simple matter to determine whether a certain transaction will result in increasing the assets of a concern—or in reducing the net profits. While in the majority of cases this is true, it happens more frequently than one would suppose that the business man or the accountant is called upon to decide in difficult cases whether an expenditure is a "capital expenditure" or a "revenue expenditure." Similarly, there may be a doubt as to whether a receipt is a capital receipt or a revenue receipt.

"Capital receipts" represent sums contributed to a business with the intention that they be used to carry on the enterprise.

"Capital expenditures" is a term given to expenditures incurred for the purpose of acquiring and extending or completing the equipment of an enterprise in order to place it on a revenue earning basis or to increase its earning capacity.

"Revenue receipts" are the receipts of business operations—in other words, they are earnings. The cash revenue receipts will generally be less than the actual earnings, as practically no line of business is on a strictly cash basis. Accordingly the credit to revenue account, and not the receipts in cash, show the true earnings for the period.

280. *Revenue receipts more than cash receipts.*—Fre-

quently this important fact is overlooked. The cash receipts are often mistakenly construed to represent all the revenue income. An illustration of this error is the case of Eyster v. Centennial Board of Finance (94 U. S. 503). In this connection the Supreme Court of the United States put itself on record as follows:

> The receipts of the exhibition, over and above its current expenses, are the profits of the business. . . . They are, in fact, the net receipts, which, according to the common understanding, ordinarily represent the profits of the business. The public, when referring to the profits of the business of a merchant, rarely ever take into account the depreciation of the buildings in which the business is carried on, notwithstanding that they may have been erected out of the capital invested. Properly speaking, the net receipts of a business are its profits. So here, as the business to be carried on was that of an exhibition and its profits were to be derived only from its receipts, to the popular mind the net receipts would represent the net profit.

Such a decision, whatever its merit, is not in accord with accepted accounting principles. It shows plainly that legal practitioners do not always know the accountant's definition of "net profits."

281. *Intentional confusion of capital and revenue expenditures.*—How at times a corporation will juggle its accounts by charging to capital expenditures what properly should go to revenue expenditures, or *vice versa,* according to what particular feature it desires to conceal, may be illustrated as follows: A corporation has an issue of income bonds bearing interest. As explained in the volume on "Corporation Finance," the particular feature of income bonds is that the interest is not a fixed charge as with other bonds, but that such interest is only a lien against the income of the corporation,

so that only when there are earnings left after all the fixed charges are paid, will the income bondholder receive his interest. If the board of directors charges renewals and improvements, which increase materially the earning capacity of the corporation, against the earnings, instead of to capital, there will be nothing left for the income bondholder, and as his income is payable only when there are earnings, it is apparent that he is placed in an unenviable position.

282. *Surplus produced by wrong classification.*—Take the reverse situation: A corporation makes repairs and improvements which do not increase the earning capacity of the company, but are actual replacements of assets wasted during the operation. Owing to business depression, the board of directors fears that it will not be able to declare the usual yearly dividend. But to withhold the dividend might cause serious fluctuation of the market quotations of the company's stock; hence it orders such repairs and improvements charged to capital, treating them as though they were an acquisition of property and therefore an asset. Such procedure leaves the corporation a surplus which may be used for the payment of dividends. We do not here discuss the propriety or impropriety of such action; but merely cite these illustrations as showing the importance of proper classification in such cases.

283. *Capital expenditures are extended or acquired assets.*—We may safely say that most of such errors in principle and practice, indicate either lack of ability or lack of desire to discriminate strictly between capital and revenue items. One needs to bear in mind only that all expenditures that can be recorded as capital expenditures must be represented by actual assets. Expenditures which have been incurred upon revenue account

are never represented by the addition of permanent assets. Has the particular expenditure, incurred in any individual case, been for the sake of improving the earning capacity of the enterprise? In that case, it is a charge against capital and should be classed as a capital expenditure. If, however, the result of the expenditure has been such as merely to place the earning capacity of the undertaking on the same footing it occupied previous to a decline—such decline being due to ordinary wear and tear—then it must be charged against revenue. Only the extension or acquisition of new assets (not mere renewals) can be recorded as capital expenditures.

284. *How to charge replacements.*—Many times an apportionment of expenditures is necessary when it is difficult to tell how much of the expenditure should be charged to capital and how much to revenue expenditure. Where new works, for instance, replace old, and where such replacement increases materially the earning capacity of the enterprise, as in the case of railroad corporations where old wooden bridges are replaced by modern steel bridges, the accountant is confronted with a difficult problem. Were he to treat the entire expenditures for such new assets as acquisitions, he would have ignored the ordinary wear and tear of the old assets. On the other hand, were he to treat the entire expenditure as a replacement, it would be an unfair charge against revenue as the cost may be many times greater than the actual wear and tear. The best rule in such cases is to charge the ordinary cost of the old works, less the value of old materials, against revenue and to charge the remainder against capital.

285. *Acquisitions and not renewals capitalized.*—Some accountants, however, insist that inasmuch as vari-

ations in cost are to be expected, only bona fide betterments should be capitalized. To illustrate: If assets which ordinarily cost $200,000 were to cost in renewals $250,000, the whole cost of such renewals would be a revenue charge. If, however, the assets which ordinarily cost $200,000 were replaced by assets of a higher revenue earning capacity, owing to the superior quality of the material used, the method of apportioning should be as follows: Ascertain what the exact replacing of the ordinary assets would have cost; then charge that sum to revenue and the excess to capital.

Many accountants adopt the policy of considering the "last cost" as a capital charge. If assets which ordinarily cost $10,000 are replaced at a cost of $12,000, the excess is charged against capital. In other words, they maintain that the cost is the only correct basis, since all concerns replace their plants at the least possible cost.

286. *No accounting of shrinkage.*—Capital assets, however, may decrease in value without revenue being affected thereby. A shrinkage in the value of assets may occur from causes outside the ordinary operations of the business. Therefore, as long as these assets are not disposed of, such shrinkage can be only an estimated item, and may therefore properly be ignored in the accounts.

Summarizing, we may say that if the item for which the expenditure is made exists as an asset at the end of the current period, such expenditure should be charged to capital. If, on the other hand, it is consumed during the current earning period, it must then be charged against the revenue of that period. In exceptional cases where the revenue expenditure is extraordinarily heavy, it is proper to distribute the charge to profit and loss over a number of years. Thus, for example, when a street

railway company is obliged to change its trolley wires from overhead to underground, the cost may be several hundred thousand dollars—in large cities even a million or more. The earning capacity of the company is not increased; the expenditure, therefore, is purely a revenue expenditure. Yet it would be a hardship upon the present stockholders to charge the entire expenditure against the current year's revenue. In such a case part is charged against each year's operation for a period of five to fifteen years; the balance remaining at the close of each year being a deferred charge.

CHAPTER XXVII

GOOD-WILL

287. *What is good-will?*—Lord Eldon, in an English case, said: "Good-will of a trade is nothing more than the probability that the old customers will resort to the old place." This, in effect, was the definition employed when the subject of good-will was briefly mentioned in Chapter III. In fact, the discussion of good-will in that chapter included a recital of the fundamental principles which apply to the case. It may be useful, however, at this point to discuss this a little more fully since the question is one which to many business executives is not at all clear, and since, moreover, there are conflicting opinions on the subject among accountants.

Strictly speaking, good-will does not exist when a new concern opens its doors. True, the individual owners or partners may themselves have established a sort of good-will in that they command a certain amount of credit and reputation for sound business dealing, based upon their personal and business record, or upon their private fortunes. Indeed, they may even be in a position to create a clientele or list of customers at the outset. Notwithstanding these circumstances, the concern as an entity cannot be said to possess good-will.

Just as soon, however, as the first sale is made, the enterprise has laid the foundation stone for its good-will, and each succeeding sale adds to the value of this intangible asset.

288. *Good-will an asset.*—Obviously, a prosperous

concern, in addition to increasing its tangible assets such as plants, accounts receivable, plant and machinery and the like, also adds to its wealth this intangible asset—good-will—whether or not it is giving any thought to the matter. Since this is true, "Why," one might ask; "why is not good-will entered as an asset on its books?" There are mainly three reasons why this should not be done.

In the first place, good-will is too elusive and intangible a commodity to be capable of exact valuation. If the value were left to the proprietors themselves, it would probably be considerably exaggerated.

In the second place, to add good-will to a firm's assets, from time to time, would require a charge to an asset account and a credit either to a revenue or to a proprietary account. If it is credited to a revenue account, the period's profits are increased. If it is credited to a proprietary account, the net wealth is increased immediately—without being passed through the profit and loss account—and there is the danger that one or all of the proprietors so credited may withdraw part of this credit in cash. What would be the effect? The proprietors are distributing among themselves this intangible good-will before it is transferred into a tangible asset. Instead of actual profits, they are distributing paper profits—are, in fact, distributing the firm's capital.

In a corporation the effect of treating the increment of good-will as a profit is apparent: dividends declared out of such imaginary profits would not only render the directors liable to the stockholders in civil proceedings but would expose them to criminal action, as in the recent case of the American Malting Company. It may be argued that if such a distribution is small compared

with the actual value of the good-will, there is no particular harm. But that, again, raises the question of valuation. We cannot be certain that the value of the good-will is not placed too high. At the outbreak of the great European War, the good-will of many firms both in America and abroad was all but destroyed. Moreover, the temptation to liquidate one's credit is always present and may lead to disastrous results.

Finally, the common prejudice against the appearance of good-will among the assets of a business cannot be ignored. As has already been intimated, bankers and credit men generally eliminate good-will from the assets of a concern applying for credit. This action does not necessarily imply a doubt as the fairness of the valuation, but is taken because good-will is not considered a marketable asset. If the business should meet with financial difficulties, good-will would disappear as if by magic.

289. *When good-will may appear on the books.*—A publishing company organized to print and publish a newspaper for profit, usually prefers to buy a paper already in existence. If the paper has a satisfactory circulation and a profitable clientele, a higher price will be paid for it than if it were less well established. The price might in the one case measure the difference between the tangible assets and the liabilities, while in the other, it might properly include an additional charge for good-will. Were the new concern to purchase its own presses, organize its editorial staff, launch a subscription campaign and go in search of advertisers for its columns, much time and money would have to be spent. It is very likely, therefore, that the price which this publishing company pays for good-will is less than the sum that would have to be spent before an entirely new

paper could be brought up to the same point of profitableness.

Under the circumstances described no one could reasonably object to the appearance of good-will among the assets of the new publishing company. It is an asset which was actually paid for in the coin of the realm.

290. *Fictitious good-will.*—A few years ago, a concern was organized to exploit a new process for reproducing photographs and other pictures. The process had undoubted merit and under proper management the concern would undoubtedly have been successful. But it lacked both proper organization and sufficient capital, and before long reached a point where either reorganization or bankruptcy confronted the stockholders. It was decided to organize a new company with a very much larger capitalization. The assets and liabilities of the old concern were taken over, and in order that the man behind the proposition should control the new organization, 51 per cent of the new stock was paid to the old concern for its property. The difference between the net assets and the amount of stock issued to the old stockholders was booked as good-will. No argument is needed to prove that good-will up to that time was an inconsiderable quantity. In fact, it was a wholly fictitious asset.

Yet good-will is created in this manner more frequently than one would suppose. The United States Steel Corporation, when it was organized, took over the properties of the subsidiary companies at what was then regarded as greatly inflated values. The properties of most of these companies did not seem to warrant the large good-will which the Steel Corporation was required to pay. The argument advanced, however, was that under the new organization, with its capacity for

more economical management, the profits would be vastly greater than they had been prior to the combination. Subsequent events proved the soundness of this argument, but they also encouraged other concerns to advance the same argument where no justification for it really existed. The price paid for good-will, however, is largely a matter of financing.

291. *Writing down good-will.*—When one business takes over the assets of another, and pays part of the purchase price for good-will, so long as the concern continues to prosper there is obviously no depreciation in the good-will. So long as profits are maintained, it might be said, rather, to improve with age. Under these circumstances, Dawson in his "Accountants' Compendium" advocates that the best course to follow in most cases is to allow the good-will to stand on the balance sheet at cost, and gradually to set aside out of the profits a special reserve until the latter shall equal the cost of the good-will. Certain it is that the weight of opinion is in favor of reducing the value of good-will upon the books, regardless of the fact that it may actually be worth even more than the amount at which it is valued. The omission of good-will as an asset in the accounts of a partnership, does not, however, prevent a retiring partner from receiving payment of his share of it if such good-will really exists. This notwithstanding the fact that in a Glasgow case the judge refused to recognize good-will because it was not mentioned in the balance sheet.

The books of account, as we have seen, should invariably present the facts as they are known to exist. While good-will may be known to exist, its real value is *not* known. For that reason, it is the safer course to eliminate it from the books as soon as practicable. This does

not mean, however, that when a new firm purchases good-will it should charge it to the first year's profits. Such a procedure would not only give an unnaturally small profit for the year, but would be wrong in principle, since the current year's operations cannot be said to be responsible for the charge. The safe and conservative course to follow in that case is to spread the charge over a period of years.

292. *Valuing good-will.*—While a great many circumstances must be taken into consideration when the valuation of good-will is to be determined, there are always three conditions which must be present before good-will can be said to have an appreciable value. The person to whom good-will passes must in all cases have: first, the right to carry on business at the same place as that at which it was formerly carried on; second, the right to use the old name and to represent himself as the legitimate success or of the former proprietors; third, exclusive right so to represent himself.

With these conditions present, the value of the good-will must be calculated upon the basis of the experiences of the concern which enjoyed the privileges before they were transferred. The measure of value varies. In some cases, the number of customers is calculated at so much each. This is frequently true in publishing houses where the circulation list forms the basis. In other cases, the profits for a number of years back are "capitalized." Perhaps, the most common method is for the seller to state an arbitrary price for which he is willing to transfer his business, and for the buyer to "beat down" this price as much as possible. The result of such haggling depends, in the last analysis, upon the intensity of the desire of the seller to retire from, and of the purchaser to enter into, the business.

293. *Number of years' purchase.*—A usual method of calculating good-will is to find the "number of years' purchase." A flour mill, let us say, owns a plant, the book value of which is $30,000, and in addition has other assets amounting to another $30,000. The total liabilities are $22,000, which leaves a net wealth of $38,000. The plant, however, has depreciated $6,000, so that the net worth actually is only $32,000. The average profits for the last five years have been $4,400 a year.

The investment of $32,000 in other securities might have earned 6 per cent per annum. The purchasers of the concern would consider only the actual profit in excess of this interest which they could get upon their money. Therefore we must deduct from the average profits the interest which the money would earn outside—in this case $1,920, which leaves $2,480 as the average net profits to serve as the basis of the good-will calculation. It remains then only to determine how many years the buyers of the property are willing to wait for the good-will to be brought back to them in the form of profits. This period, let us say, is established as five years. By simply multiplying $2,480 by five, we find the good-will value to be $12,400.

QUIZ QUESTIONS

(*The numbers refer to the numbered sections in the text.*)

PART I: ACCOUNTING STATEMENTS

CHAPTER I

1. Outline briefly the history of accounting.

2. Of what value to modern business have been these ancient methods?

3. Does every man need a system of accounting?

4. Show how accounts may serve both as legal and business records. To which use are they ordinarily put?

5. Of what value as a test of previous results are accounts? How often should such information be available?

6. How can an executive use his accounts as a test for fraud?

7. How as a measure of efficiency?

8. What use can be made of records when deciding upon new policies?

9. Upon what is foresight based?

10. Why is a knowledge of accounting important to business men?

CHAPTER II

11. In what do the important functions of a firm's accounting center? Into what two groups may they be divided?

12. What is a balance sheet? How may the reader prepare one for himself?

13. What purpose is served by the balance sheet? Of what value is it in securing credit?

14. Name and describe the different forms of balance sheets.

15. Why are balance sheets not strictly accurate? How should the assets be arranged in order?

16. Define fixed assets. Name some different kinds of property to which this term might be applied.

17. Distinguish between fixed and current assets. Name some kinds of property to which this term applies.

18. What are deferred assets? Give examples. Into what three classes has the property on the asset side of the balance sheet been divided?

19. Into what two classes may the liability side be divided? Compare as to accuracy and order with the statement of assets.

20. What are fixed liabilities? Give examples.

21. Classify as current or fixed liability: Note at 30 days for $5,000, mortgage on plant for $8,000, bills due $600.

22. Should capital and surplus be considered as liabilities?

23. From what sources are reserves drawn?

CHAPTER III

24. By what four different values may assets be computed? Explain the use of the liquidation method.

25. In deciding upon land values, what is the accounting practice as to legal expenses in acquiring it,

subsequent changes in its value, interest payments? In respect to buildings, discuss the practice as to depreciation and renewals.

26. In estimating the value of machinery, discuss the practice concerning depreciation, expenses of installation, and removal charges.

27. Why do patterns, drawings, etc., undergo rapid depreciation?

28. What depreciation rate should be charged on furniture and fixtures?

29. Why are patents of questionable value? What accounting practice is proper in this case? In the case of copyrights?

30. What is good-will? Why is it difficult to value?

31. How determine whether investments should be classified as fixed or current assets? How should they be valued?

32. In what case might a lease be considered an asset?

33. Under what circumstances do accounts and notes receivable possess less than their stated value?

34. When should the cost price be taken in the inventory value?

35. Explain the approved practice regarding advances to employés.

36. What is commonly done concerning accruals?

37. At what value should deferred assets be entered?

CHAPTER IV

38. To which is attached more importance, the valuing or the arranging of liabilities?

39. Of what importance is the classification of liabilities?

40. How should bond issues and values be shown in the balance sheet?

41. How should mortgages be shown?

42. What two important kinds of current liabilities are there?

43. What information should be given as to collateral loans?

44. Show how such an item as accrued wages may arise.

45. Explain the method of treating accrued interest?

46. What is a deferred liability?

47. For what purpose in general are reserves? What is meant by depreciation?

48. What is the chief difficulty met with in providing a reserve for bad debts?

49. For what general purpose is the contingent reserve?

50. How may capital stock be shown in the balance sheet?

51. Why is a surplus maintained? From what source should it be drawn?

52. What purpose is served by the balance sheet? How is it being made more useful?

CHAPTER V

53. Of what importance is the profit and loss statement? Illustrate how the profit or loss may otherwise be determined.

54. What information is desired in addition to net profit or loss?

55. Describe the old form of profit and loss account.

56. Describe the new account form. What advantages does it have over the old?

57. For what purpose was the new form of statement developed? Explain the Steel Corporation's statement as you would to a friend.

58. Into what classes of expense is the manufacturer's cost price divided?

59. How is the selling profit computed?

60. What items are included in expense of administration? How is the gross income found?

61. From what subsidiary sources may income be received?

62. What items are termed income charges?

63. How is the net profit distributed? In what respect is business practice here ahead of legal requirement?

64. Describe a comparative profit and loss statement. What information do you draw from the sample statement shown?

65. What is a condensed statement? Where may one secure detailed information?

CHAPTER VI

66. What is the general book of accounts? How is the sales record kept?

67. By what means can additional sales information be secured? Illustrate the operation of this method.

68. From what products might the returns be termed miscellaneous sales? How is record of these kept?

69. What distinction between income from sales and income from investments?

70. Distinguish between trade and cash discounts. Into what section of the profit and loss statement does cash discount go?

71. How is the accountant to dispose of special profits?

72. What error is one liable to make regarding expense and payments? Illustrate.

73. Distinguish between costs and expenses. What is covered by the term outgo accounts?

74. What is included by the term material? Is the distinction direct and indirect materials shown in the profit and loss statement?

75. Explain how labor is classified. Into which class do the engineer's wages go? The machinist's?

76. What items are comprehended by the term factory expense? What three elements constitute cost?

77. In principle does sales expense differ in manufacturing and commercial concerns? Of what items is it composed?

78. Of what value is a knowledge of comparative administrative expenses?

79. Which of the opposed views concerning income charges seems preferable? Into what accounts are discounts entered?

80. How is the net profit found? In what case is its distribution under legal control? Is such control clear and explicit?

81. Explain the method employed in transferring net profits.

82. In what case does a deficit mean an impairment of capital? How may this be shown? How is this showing at times avoided?

CHAPTER VII

83. How is a schedule of accounts receivable prepared? What questions will it answer?

84. Of what service to the management is an accounts payable schedule?

85. Which department may be said to hold the balance of power? What analysis of sales information should be prepared?

86. By what means are expense accounts often made to yield promising returns?

87. Show how analysis may be applied to departments.

88. What general claim may be made concerning the value of statements? How does promptness in preparing them affect their value?

89. Of what special advantage are graphic charts? How would you use a graphic chart in your business?

90. Indicate in outline form the various kinds of statements which have been discussed. For what chief reason are adopted systematic methods of keeping accounts?

CHAPTER VIII

91. Contrast the attitude toward accounting held heretofore with that of the present. Why should all department managers understand accounting?

92. Define bookkeeping. To what sorts of transactions does it apply?

93. How detailed should the records be?

94. Which classification is of importance?

95. In what ways can time be saved in bookkeeping?

96. What two systems of bookkeeping are used? Which predominates? Define an account.

97. Upon what principle is double-entry bookkeeping based?

98. What occurrence may a debit represent? A credit?

99. Compare the procedure in the case of single entry with that of double entry.

100. Into what classes are accounts divided?

CHAPTER IX

101. What is a book of original entry? Of what legal importance are such books?

102. Legally, what may constitute a book of original entry? By observing what two factors is the value of such books increased?

103. In how many books do financial transaction appear? What is the present-day practice as to day books?

104. To what use is the journal put? Explain how part of its functions have been turned over to subsidiary books.

105. Tell how the cash book is used. In your business is a simple or columnar cash book used?

106. For what purpose is a petty cash book used? Describe the operation of the "impressed system."

107. To what use is the sales book put? How is it changed for particular businesses?

108. What is a return book? How is it kept?

109. Describe the use of the purchase book.

110. How are purchases recorded by the voucher system?

111. In what way are sales records simplified?

112. What relation does the journal bear to the various books described?

CHAPTER X

113. In what respects are the posting mediums inadequate? What distinct class of accounts does it contain?

114. Rule on a blank sheet of paper the simplest form of ledger.

115. As accounts become too numerous, what ones are removed from the general ledger? What record, however, is still kept in the general ledger?

116. How are purchase accounts handled?

117. Why does the term ledger not necessarily refer to one book?

118. For what reason may a private ledger be kept? How is the relation between it and the general ledger shown?

119. What advantages have the loose leaf and card ledgers? What disadvantages?

120. What special rulings may be introduced into the ledger?

121. Describe the Boston ledger. What limitation has it?

122. In what order as groups is it well to classify ledger accounts?

123. Why are general accounts, as expense, being analyzed into particular accounts?

124. The various subsidiary books are drawn from subdivisions of what two books?

CHAPTER XI

125. Why is the accounting often neglected in launching a business? Comment on this practice.

126. From what sources are secured information for the opening entries?

127. With what detail and references should the opening account be expressed?

128. Make the opening entry for Charles Jones who enters retailing, capital $3,000. Supposing he buys groceries $1,500 and pays $300 for fixtures, continue the entry.

129. Should the shares be paid in, how is the opening entry made in the case of a corporation?

130. What terminology indicates that shares are subscribed but not paid for?

131. How is the entry made when the shares are partly paid in?

CHAPTER XII

132. What way is most satisfactory to reach an understanding of accounting procedure?

133. What enterprise is here to be taken as an example?

134. Explain the various entries made in opening these books.

135. Into what books are placed the shipment receipts? The cost of sending out announcements?

136. What disposal is made of money advanced to the salesmen? To the cabinet maker?

137. In what book is recorded the shipping materials received?

138. In what book go the sales records? What special rulings are here used?

139. To what book and columns do we turn to record the Plautenberg order?

140. How does Mr. Brown decide to handle petty

expenditures? What special ruling does he decide to use in this book?

141. Into what books are placed orders for goods, and receipts of goods?

142. Why are some of the various expense items lumped while others are entered separately?

143. Should goods be returned, what is the procedure?

144. Explain how the item "discount" is disposed of.

145. When money is borrowed on note, how is the item handled?

146. In replenishing the petty cash fund, how is the item handled?

147. How is the item "discount allowed" handled?

148. When customers pay, how are the items disposed of?

149. What is the procedure in case the proprietor draws money for his personal use?

150. What disposition is made of the crate and case item? Of the payment made for goods?

151. How shall the September 24th items be recorded?

152-155. Take up these items one by one and tell how they are to be disposed of.

156. Why is a definite salary arranged for Mr. Brown? How is the salesman's commission item handled?

CHAPTER XIII

157. In practice, how often is the posting completed? Explain how an account is posted from the purchase book.

158. How are sales items posted?

159. Describe the closing of the cash book.

160. What is a trial balance? Its purpose? How is it prepared?

161. Why will the difference between purchase and sales rarely indicate the gross receipts? What is an inventory?

162. Into what two classes do our business operations fall?

163. What items are shown in the profit and loss statement?

164. Why does Mr. Brown establish a $30.27 reserve?

CHAPTER XIV

165. For what purpose is a separate profit and loss statement desired? From what accounts is it prepared?

166. What information is revealed by a profit and loss analysis?

167. From what accounts is drawn information for the balance sheet?

168. How is the information concerning customers and creditors arranged so as to be of more service?

PART III: VARIOUS FORMS OF ACCOUNTING

169. Define partnership. Why are such relations so frequently entered into?

170. Of what importance is a knowledge of partnership law? Upon what four elements is a partnership based?

171. Name the various classes of partnership.

172. What are the different classes of partners?

173. Mention some of the various rights, duties and liabilities of partners.

174. What are some of the usual classes in the partnership agreement?

175. In general, judging by Professor Hardcastle's list, what is expected of a partner?

CHAPTER XVI

176. How are partnership books opened? Suppose one partner contributes a real estate equity, how is the item shown?

177. Show how $10,000 profits distributed equally would appear in the journal.

178. Is it necessary to stipulate that interest is to be allowed on investments?

179. What two cases of partnership dissolution may be noted? In connection with one, what particular question arises?

180. State briefly the problem which faced A, B, C and D's accountant.

181. In dissolving a partnership, what is the first step? What groupings of assets and liabilities are of value in this connection?

182. Describe the process of liquidating a partnership business.

183. Should one partner withdraw, how is the goodwill item handled?

184. In selling the partnership to a corporation, what bookkeeping summary is made the basis of the calculation? How are the reserves handled? The stock transfers?

CHAPTER XVII

185. Compare the corporate with the partnership form of organization.

186. In brief, how is a corporation organized? How controlled?

187. Describe the use of the minute book. Why is this book considered of importance by accountants?

188. For what purpose is the subscription book used? The instalment book? The certificate book?

189. What is the stock ledger? What information does it contain?

190. What information is kept in the stock transfer book? May there be more than one of these books?

191. Of what use is the dividend book? The instalment ledger?

CHAPTER XVIII

192. Distinguish between stock and capital. How may stock issued be shown?

193. What is the procedure necessary in changing the amount of capital stock?

194. How are the various kinds of stock recorded?

195. What is a bond? Why at times issued instead of stock?

196. What is meant by sale of bonds at a premium? Below par? How does this affect interest rates?

197. From what sources may come increases in the net wealth? Are all such increases distributed to stockholders?

198. Define dividend. How is the amount of dividends determined? In what forms may dividends be paid?

199. Distinguish clearly between unissued stock and treasury stock.

200. For what purposes are created sinking, redemption, or contingent funds?

CHAPTER XIX

201. What is the problem here presented to the C. B. White Company's accountant?

202. How are the books opened for a corporation? How are the treasury stock and stock bonuses items disposed of?

203. Tell how the books are treated preparatory to changing from partnership to corporation.

204. Explain the various opening entries necessary after this change has been made.

205. Under what conditions is it well to dispose of stock on the instalment plan? Suppose stock partly paid for is forfeited, how is the item entered?

206. Should the capital stock be increased, how is this fact shown in the books?

207. What restrictions upon the decreasing of capital stock? How is such decrease entered on the books?

208. When an assessment is made, how is the item disposed of?

CHAPTER XX

209. Point out the distinction between merger and consolidation.

210. What distinction exists between merger and consolidation, and parent and holding companies? What further distinction between the latter two?

211. With what sort of items do the books of each type of corporation deal?

212. Explain the entries made by the K. T. Company upon its merger.

213. What entries are made by the Red Head Company upon the merger?

214. Illustrate the accounting procedure in the case of a consolidation.

215. When a parent company is organized, how is purchase of the subsidiary companies indicated?

216. What is the method followed in case of a holding company?

CHAPTER XXI

217. What is the important difference between a manufacturing and a trading company? The acounting system in a trading company must be devised to serve what three departments?

218. How numerous are the separate sets of books kept in a department store? Why?

219. Trace the sales check copy made by a salesgirl in a department store.

220. How are cash receipts handled?

221. To what extent are return goods an important item? How are they handled?

222. By what means is posting to the ledger simplified? Why may a small concern profitably study the methods of larger concerns?

223. Why does a consideration of branch office accounting properly belong in this chapter? Why is it an important subject?

224. Describe the summary report method of branch accounting. What defects has it?

225. What disadvantages in the detailed daily report system? What advantages?

226. Enumerate the main features of the centralized accounting method.

227. Explain how the centralized system would be used by a typewriter firm, for instance.

228. At the home office, how under the centralized system are items charged? How are monthly reports gotten out quickly under this system?

229. What condensed reports are prepared?

230. Tell how the controlling accounts are operated.

CHAPTER XXII

231. Why are manufacturing accounts and costs now receiving increased attention? What is the purpose of manufacturing accounts?

232. Why should the manufacturer keep separate the two branches of his business? What detailed information does he desire as to his costs?

233. Give an example of continuous process production.

234. In what sort of establishments is the production process intermittent? Why are their cost records not kept in the general financial books?

235. Which is supplemental to the other, cost accounts or general accounts? To what extent do the cost accounts agree with the manufacturing accounts upon the general books?

236. Into what three general classes are costs divided?

237. Why are the cost accounts usually departmentized? Illustrate.

238. How many sections in a manufacturing concern's profit and loss accounts?

239. Outline briefly the problems here to be solved.

240. Explain briefly how is found the percentage to be charged to factory overhead.

CHAPTER XXIII

241. Explain the use of the terms inward and outward consignments. In what case is the receiver a principal? An agent?

242. How are consignments entered in the accounts?

243. What are joint adventures? How are such items entered?

244. Illustrate the accounting procedure in case of joint adventures.

245. Using the foregoing entries as examples, prepare the accounts called for in this section.

CHAPTER XXIV

246. What is meant by realization and liquidation? What conclusions may be stated regarding such accounts?

247. Illustrate the accounts required for a partnership dissolution.

248. For what other purposes may the realization and liquidation account be used?

249. In this example given, what steps did the trustees take toward realizing?

250. From the various trustees' accounts given, illustrate the methods of realizing on a business.

251. State briefly the problems here presented for analysis.

252. What difference between this trustee account and those given heretofore?

253. Distinguish between the trustee's aim in insolvency with that held in the foregoing cases. What information should the balance sheet of an insolvent show?

254. What claims are preferential? What is a statement of affairs?

255. How is an insolvency case handled? Illustrate.

256. Supposing you were called in to prepare the accounting statements for Jones and Jones, insolvents, outline your course of procedure.

257. How are supplementary schedules used?

PART IV: SPECIAL TOPICS

CHAPTER XXV

258. Discuss the growing importance being attached to depreciation funds. Illustrate.

259. Upon what reasoning is the depreciation theory based? What besides wear and tear does depreciation include?

260. Should depreciation be disregarded if the assets increase in value?

261. What argument against allowing depreciation when assets appreciate is at times advanced? Is this sound?

262. By what methods is depreciation provided for?

263. What is the distinction between reserve fund and reserve account?

264. Suppose when a certain asset is sold not enough is found to have been set aside for depreciation, what accounting entries are made?

265. Of what importance is the determining of the depreciation rate? Why is it at best not entirely accurate?

266. Describe the simplest means of determining the amount of depreciation to charge.

267. Explain the declining balance method of figuring depreciation. What advantages has it? What disadvantages?

268. What is the annuity method?

269. Compare the three methods of figuring depreciation. Which seems preferable?

270. How is the depreciation rate put into operation?

271. Why cannot a general standard depreciation rate be determined? What are some of the rates fairly well established?

272. Why do the depreciation rates on machinery vary?

273. What rates are advised for moulds and patterns? For patents and copyrights?

274. What is a secret reserve?

275. Are secret reserves defensible?

276. What are sinking funds?

277. Should sinking funds be charged against revenue?

278. What reason does Mr. Anyon cite why using profits for the benefit of a sinking fund is opposed?

CHAPTER XXVI

279. Distinguish between capital and revenue.

280. Compare in amount revenue receipts with cash receipts.

281. Why are capital and revenue expenditures at times intentionally confused?

282. Illustrate the importance of a proper classification of these two items?

283. How determine whether an expenditure be charged to capital or to revenue?

284. Supposing replacements of an improved sort are made, how is the item charged?

285. What plans of charging betterments are recommended by some accountants?

286. In general, what methods in this respect should be followed?

CHAPTER XXVII

287. What is good-will? When does it begin to develop?

288. What reasons against entering good-will as an account?

289. Under what circumstances may good-will be entered upon the books?

290. How is fictitious good-will created?

291. How should the item good-will be written down?

292. How is a value set upon good-will?

293. What is the usual method of calculating good-will?

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